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## **Plants and Animals**

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*Colorado*

### **Kids for City Kids Day Camp**

#### **Situation:**

The original camp began three years ago and was called Kids for City Kids (KFCK). The idea for the camp was first found in a sheep magazine. An agent then adapted it for the county and the program she foresaw. The idea was to give urban youth a taste of the country life that so many never experience, and also to give youth at risk an opportunity to get out and find something that they loved to do but had never had a chance to do before. The first year, press releases and newspaper articles were run in many areas, but the participation was low with only six campers. It was after getting the involvement of the West Center, School District 11 that enrollment jumped to more than 45 participants. It continues to expand every year. Penrose Stadium donates its facilities, and the program adjusts its schedule depending on stadium availability. The stadium allows use of its barns and smaller arenas, and the state park area around the stadium is wonderful for walking with the animals.

#### **Program Description:**

About 20-30 children attended each of the five sessions of this year's camp. Participants, ages 9-14, are typically from an urban area, and they have had very little hands-on interaction with large domesticated animals. The animals available to the campers are goats and sheep. Llamas are available for use by returning campers. The camp is a 3-hour program, 4 days a week. The program is designed to allow children who have not had the experience of working with large animals the opportunity to experience the hard work as well as the rewards and enjoyment of "owning" an animal for the week at camp. The campers take on the full responsibility of the animals for the entire camp. This includes feeding, watering, bathing, and exercising their animals, and learning how to properly show their them. They learn basic health care and gain knowledge of the endoskeleton and exoskeleton. The goal for the participants is to have the campers leave with a well-rounded knowledge of their species, as well as understand the responsibilities and the triumphs of working with animals. While the goal of the program as a whole, in direct correlation with the community, is to expand their interest and knowledge of a variety of animals beyond the basic cats and dogs, it is also to continue their interest in 4-H.

#### **Stakeholder Satisfaction:**

The camp has a variety of qualities, different from the typical day camp offered to children during the summer. It is very specialized, focusing only on the species available for the camper's use, and thus cuts out many of the other items a day camp is known for. It requires a staff of employees and volunteers who are very knowledgeable in the area or species they are teaching. Volunteers are mainly junior leaders in the local 4-H groups and are breeders and showmen in the correlating

4-H projects. It is a very intense, activity-filled 3 hours with little down time, which avoids possible disciplinary problems and boredom that may arise otherwise. A variety of hands-on activities, such as shearing, milking, and grooming, are demonstrated throughout the week. The campers are taught the best way to keep the animals healthy, along with the variety of uses of the animal. The camp allows children to feel as if they own the animal and that they are its sole caretakers, which creates a passion and love for what they are doing.

Word search puzzles are used as a teaching tool. The puzzles use the words from the lesson taught for that day, which enables the campers to remember the words in a fun way and not by taking notes. The word search is also a study guide for those who wish to study at home. This side activity gives the campers a chance to rest, and children are encouraged to work together as a team to successfully find all the words.

Each year the camp has grown in numbers. About 50% of campers return each year. Most days the campers leave very tired but exhilarated with stories of all the events from the day. There is a very noticeable improvement between the interaction of the campers and the animals over the week. The patience of working with ornery animals and understanding the responsibility to their animal increase over time. The campers display maturity and comfort working with the animals on the last day, that was lacking on the first.

#### **Accomplishments and Impacts:**

The camp sparked an interest in and a larger understanding of 4-H. It encouraged people to go to the county fair and watch 4-H members show their animals. Parents were able to see their children handling animals that they were used to seeing only in a petting zoo, and they witnessed their children's confident handling and working with the animals. Participants were given the chance to show their animals at the county fair in a show designated specially for the Kids for City Kids. Kids couldn't stop smiling with pride at the fair as they prepared to show their animals. The true spirit of sportsmanship and true competitiveness came through, showing the respect the campers had for themselves, their animals, and one another. The community was given the opportunity to see all the variety of uses of the animals and to understand the animals' personalities. The participants learned that the goats, sheep, and llamas are animals that are very versatile and practical to own. The camp staff received letters of thanks, saying things such as, "You have helped my child more than you and maybe even he will ever know, and you may help countless others. PLEASE continue with your program." One child drew a picture and wrote a thank-you letter for each of the main leaders, saying "This is a great camp and a great chance for city kids. I'll see you at the County Fair!" Countless verbal praises and the evaluation show almost 100% approval of the camp and that a large percentage of campers wish to return.

#### **Resource Commitment:**

The West Center Neighborhood Resources gave a stipend amount of \$620. There was also a \$25 registration fee for each camper, and this was dependent upon his or her ability to pay. Libby George, 4-H Urban Expansion Coordinator at Colorado State University Cooperative Extension, is the founder of KFCK. Libby is a part-time employee and spends 50% of her .5 FTE

appointment on coordinating the camp.

**Collaborators:**

Most of the staff members on a daily basis at the camp are 4-H junior leaders who volunteer their time to share their knowledge. The 4-H office also is a large supporter, along with local breeders, Penrose Equestrian Stadium, Union Printers Home, West Center Neighborhood Resources, and School District 11.

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*Indiana*

## **Teaching Youth Through 4-H Animal Science Workshops**

**Situation:**

The Animal Sciences Workshop for Youth had its beginning in 1972, when two Purdue University faculty members were seeking a new forum to teach livestock management skills to 4-H youth. Their goal was to educate youth about animal production practices, while stimulating their minds to think about new and improved ways of raising animals. By bringing 4-H youth together with animal science professors at Purdue, the founders of the workshop felt they could teach and recruit students at the same time. An intensive 3-day training workshop resulted from the collaborative efforts of an animal scientist and a 4-H Youth Development specialist.

Through the years the workshop has had the following objectives:

- ! To develop and foster life skills through positive interaction with others.
- ! To teach scientific principles of animal science to young people.
- ! To increase the awareness of animal industry issues among youth.
- ! To inform participants about careers in animal agriculture and educational opportunities at Purdue University.
- ! To prepare delegates to share what they learn at the workshop with others in their communities.

**Program Description:**

In addition to specie workshops, a variety of educational means has been utilized to accomplish the workshop objectives. Purdue faculty members have incorporated sessions on the Internet, along with town hall meetings to help stimulate the thinking of workshop delegates. Prior to the workshop, the committee selected five current topics of special interest to the livestock industry. Delegates were assigned one of these topics at the opening session. They were then given several opportunities to work in teams to learn both the pros and cons of their issue. Part of their research was conducted in organized sessions on the Internet, where faculty members had book-

marked helpful sites. On the final morning of the workshop, all of the delegates gathered in the Purdue ballroom to have a town hall meeting and openly discuss their findings on the issues. Media specialists and outside authorities were brought in to serve as moderators and offer their critique of each group's performance.

### **Stakeholder Satisfaction:**

Since 1996, sixteen out-of-state scholarship winners from eight states have been chosen to attend the rabbit workshop, thanks to an endowment established in honor of the late T. E. "Doc" Reed, who was an instructor at the early rabbit workshops. In 1999, an "honor group" of rabbit delegates was invited to pay their own way to attend the rabbit workshop. As a result, five rabbit enthusiasts from California, Idaho, Ohio, and British Columbia joined the workshop. Three of these out-of-state delegates are planning to attend Purdue University as a result of participating in the Animal Sciences Workshop for Youth.

### **Accomplishments and Impacts:**

From the first 3-day workshop in 1973, a significant educational program evolved that has impacted families in all 92 Indiana counties and more than 8,000 youth delegates from 11 states and British Columbia. A survey of the 225 delegates in attendance at the 2000 Animal Sciences Workshop for Youth revealed the following information:

- ! 90% of the delegates found the workshop to be a positive learning experience.
- ! 76% of those in attendance said they learned information at the workshop that would help them better manage their 4-H animal project(s).
- ! 85% of the delegates indicated their understanding of the technology used in animal sciences had increased as a result of attending the workshop.
- ! 78% of the youth said they were motivated to share the information they had learned at the workshop with others in their community.
- ! 85% of the delegates said the workshop had increased their desire to pursue a college degree.
- ! 88% of the youth said their impression of Purdue University had improved as a result of attending the workshop.
- ! 91% of the delegates indicated they would encourage others to attend the Animal Sciences Workshop for Youth.

### **Resource Commitment:**

To pay for housing and meals, workshop delegates currently pay an \$85 registration fee. In addition, \$5-10,000 of support for the Animal Science Workshops is generated on an annual basis as a result of the generosity of animal-related state associations and various agricultural enterprises that realize the educational value of the workshops.

### **Collaborators:**

Creighton Brothers – Warsaw, IN; Hubbard Milling Company – Mankato, MN; Indiana Aquaculture Assn. – Martinsville, IN; Indiana Beef Cattle Assn. – Indianapolis, IN; Indiana 4-H Foundation – Indianapolis, IN; Indiana Horse Council Foundation – Indianapolis, IN; Indiana

Meat Packers and Processors – Portland, IN; Indiana Pork Producers’ Assn. – Indianapolis, IN; Indiana Rabbit Breeders’ Assn. – Lafayette, IN; Indiana Sheep and Wool Market Council – West Lafayette, IN; Indiana State Dairy Assn. – West Lafayette, IN; Indiana State Poultry Assn. – West Lafayette, IN; Moorman Manufacturing Company – Bluffton, IN; Northstar Select Sires – Lansing, MI; Turkey Market Development Council – West Lafayette, IN; United Feeds, Inc. – Sheridan, IN.

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*Maryland*

**Farmers and Children: Growing Our Future Together**

**Situation:**

The rural landscape of St. Mary’s County has undergone tremendous changes in the past decade as the urban population of the county continues to change and expand. Members of the agricultural community and the St. Mary’s County Office of Maryland Cooperative **Extension** recognized the need to provide education to the urban public concerning agriculture and the many different ways it affects their lives on an everyday basis.

**Program Description:**

Three educational programs have been conducted in St. Mary’s County at the following locations: Carver, Bannekar, and Park Hall elementary schools. Educational programs offered information and instruction in general agriculture awareness in the following areas: livestock identification; animal husbandry; grain production; grain identification; products made from grain; and grain nutrition. Teaching was conducted using large farm machinery, livestock, and grain samples in aiding participating youth to enjoy a hands-on learning opportunity. The program goal was to educate urban youth about the significant role agriculture plays in their everyday lives. Program objectives included:

- ! Use hands-on and real life examples to strengthen developmental skills, life skills, creativity, and social learning skills.
- ! Provide opportunities for urban youth to participate in county 4-H programs.
- ! Provide opportunities for urban youth to learn about agriculture practices in their county.

**Stakeholder Satisfaction:**

Three extension educators representing the program areas of 4-H youth development, agriculture and natural resources, and family and consumer sciences gave a combined total of .25% FTE to the programs. About 1,200 students participated in a series of three workshops centered on the agriculture awareness theme. The hands-on approach to learning incorporated by the educators

helped participants' interest levels and kept the youth interested in learning the subject matter. Teachers and administrators were very pleased with the demonstrations, teaching, and interest level of their students.

**Accomplishments and Impacts:**

About 1,200 youth participated in the "Farmers and Children: Growing Our Future Together" programs held in St. Mary's County. All participating youth were educated in grain science and livestock education and were introduced to the St. Mary's County 4-H youth development program. About 50% of program participants were minorities. As a result of the programs:

- ! The South Hampton 4-H club was organized the week following the program in the Carver Elementary School Community. Twenty-two youth who attended the Carver Elementary program and received information about 4-H at the program joined the club and participated in an 8-week summer 4-H program.
- ! The program at Bannekar Elementary opened the door for an After-School 4-H program to begin. A total of 26 youth attending the agriculture awareness program joined the Bannekar After-School 4-H Club, which continues to function during the school year.
- ! The program at Park Hall Elementary sparked an immediate interest in 4-H, and more than 30 youth have participated in special interest activities held throughout the year at the school and in the county.

**Resource Commitment:**

\$600 in program development funds; .25% total of three FTE's; 20 volunteers (adult and teen); 4-H animal projects; school administrators and teachers.

**Collaborators:**

St. Mary's County Public Schools (Bannekar, Carver, and Park Hall elementary schools); St. Mary's County Department of Community and Economic Development; Donny Tennison (farmer); St. Mary's Young Farmers; Maryland Cooperative Extension – St. Mary's County Office.

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**Other Base Program Areas This Program Applies to:**

Agriculture; Nutrition, Diet, & Health

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*Idaho*

## **Improving Youth Livestock Programs Through Ultrasound Technology**

### **Situation:**

The livestock project is considered to be the “bread and butter” of the FFA and 4-H programs in many states. While traditional livestock-centered FFA & 4-H programs have been instrumental in bringing these two youth development programs to where they are today, will they take agricultural education into the future?

Youth livestock shows can be an effective teaching tool for youth development, as well as for agriculturists and consumers of the future. Educational methods employed by FFA and 4-H can either be responsive to future needs and technological advancements or risk becoming obsolete.

### **Program Description:**

Ultrasound data has been collected from Idaho county extension programs using ultrasound technology in the evaluation of show animals at county fairs for the past 5 years. Two groups of Idaho county extension educators have been trained and certified to collect ultrasound data, and they work in teams to collect data and implement educational programs regarding the use of ultrasound technology in livestock evaluation. These teams of extension educators use ultrasound data to educate youth livestock producers about USDA market specifications and demonstrate how this technology can evaluate the extent to which their show animals meet those specifications. Animals are scanned at the fair, and youth receive information on their animal at the time of scanning. The information is available for the judges to use at their discretion. Youth are rewarded for raising animals that fit industry standards.

### **Stakeholder Satisfaction:**

Each year youth and leaders look forward to this data collection to determine how well their animals compare to industry standards. In many cases, the ultrasound scan is the only available carcass measurement available to small county fairs with no access to slaughter facilities in their immediate area.

Using ultrasound as an educational tool, the youth involved can best explain their approval. As one 4-H member puts it, “Now I can look at my pig and tell if he is too fat; before we used ultrasound, my pig was just a pig.” Another youth adds, “When my animal meets the gold standards and I get a certificate, I know I did my best.”

### **Program Impact:**

A 2000 survey of county Extension programs in Idaho revealed that 62% of county 4-H programs use real-time ultrasound technology in evaluation or educational processes at county fairs. In addition, ultrasound data have been collected on the market steers at the Eastern Idaho State Fair

from 1995 through 1999. The percentage of steers grading choice, as identified with ultrasound, in 1995 was 23 percent, with an average yield grade of 2.8. Percentage of steers grading choice in 1999 was 43 percent, with an average yield grade of 2.1.

Buyers of project animals at youth livestock shows are beginning to use ultrasound data to help them identify animals with more muscle and less fat. Using the data from the animals has not increased the value of the animal. It has, however, helped these consumers determine which animals to purchase and put into their freezers. The number of individuals buying these animals for personal consumption has increased 22 percent since the introduction of ultrasound.

**Resource Commitment:**

The dedicated county extension educators in Idaho who expend their time and effort to collect the ultrasound data are the most critical resource that makes the use of ultrasound with youth livestock projects possible. The financial cost is the next hurdle that has to be overcome. The initial investment of the ultrasound equipment is significant and can be compensated by grants from agricultural industry organizations and educational institutions, to support innovative educational programs.

The cost to collect the ultrasound data is about \$3 per head. This cost is either passed on to the exhibitor or is paid by the local fair board. The general thought is that the information passed back to the exhibitor and the breeder is worth the cost of the scan.

The use of ultrasound technology can enhance the educational opportunities available to FFA and 4-H youth who exhibit livestock, while at the same time providing a sound framework for achieving youth development goals. For youth development programs in livestock to survive and thrive into the future, they must be based on a sound educational foundation. The use of ultrasound technology can help provide that strong foundation. It is recommended that the use of ultrasound technology be expanded to youth livestock programs in other states.

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**Other Base Program Areas This Program Applies to:**

Consumer & Family Science, Science & Technology

## **4-H Livestock and Equine Symposium**

### **Situation:**

Even with the increasing urban sprawl that is affecting New Jersey, the animal science projects remain the largest 4-H program area in the state. As New Jersey is faced with a continual loss of farms, our number of knowledgeable producers and resources have also declined, limiting our educational experiences. An ad-hoc committee of equine and livestock volunteers was formed to assess the changing needs of the 4-H animal science programs. Several priorities were determined, centering around the development of a non-competitive, educational seminar for volunteer leaders and youth members.

### **Program Description:**

The 4-H livestock and equine volunteer advisory group, in cooperation with the State Department of Agriculture, designed a one-day livestock and equine symposium. The purpose of the symposium was to provide 4-H members, leaders, families, and others an opportunity to gain knowledge and skills related to their livestock and equine projects. The goals were for the participants to:

- Increase their understanding of animal ethics and positive attitudes in youth programs.
- Increase their knowledge of basic animal care and management.
- Learn to observe animals to understand when something is wrong with the animal.
- Increase their awareness of current issues affecting those raising livestock.
- Increase their awareness of available resources to support youth livestock programs.
- Increase their understanding of the NJ Dept. of Agriculture Junior Breeder Fund program.

Attendees participated in general sessions on animal ethics and positive attitudes in youth programs. In addition, the participants were able to choose from a variety of workshops that provided species specific information. Two workshops were designed expressly for adults.

### **Stakeholder Satisfaction:**

The interest in the symposium went far beyond the committee's expectations, with 524 individuals registering. (The expected number of participants was 200 people.) Due to capacity restraints, only 320 registrations could be accepted. The overall rating for the symposium indicated the participants were satisfied with the event. On a scale of 1-10 with 10 being "Great," 85% of the evaluations returned rated the symposium with a score of 7 or higher, and 100 % indicated that they would attend the symposium in 2002. The State Department of Agriculture was also very satisfied with the event and agreed to fund the event again next year.

### **Accomplishments and Impacts:**

Based on the evaluation from the symposium, (evaluations were returned from 214 participants).

- 66% of the participants indicated they increased their knowledge of animal ethics.

- 42% of the participants indicated they increased their understanding of the positive role that participating in a youth program can have on youth.
- 87% of the participants indicated they learned something new during the symposium that would help them improve how they care for their animals.
- 78% indicated they learned something during the symposium that would help them know when something is wrong with their animal's health.
- 78% of the participants indicated that they had increased their awareness of current issues affecting the agricultural community in respect to raising animals.
- 60% of the participants indicated they learned a lot about the Junior Breeder Loan program.
- 17% of the participants indicated they definitely would apply for a Junior Breeder Loan, while another 55% indicated they might apply for a loan.

**Resource Commitment:**

The New Jersey Department of Agriculture's Junior Breeder Fund & Division of Agricultural Markets provided \$7,500 in funding for the implementation of the program, which covered speakers, animal costs and handouts. The NJDA also provided in-kind secretarial help for mailings, publicity and registration. Agway sponsored a speaker for the cost of \$250. The NJDA's Equine Advisory Board provided \$500 in printing and mailing costs. The facilities were provided by Cook College – Rutgers Cooperative Extension as an in-kind service. The Cook College Farm provided some of the livestock used for the hands-on workshops, and farm staff to help handle and coordinate the animals.

**Collaborators:**

The program was coordinated and implemented in cooperation with the NJ Department of Agriculture, Junior Breeder Fund Committee, Division of Agricultural Markets, NJ Equine Advisory Board, NJ FFA, NJ Equine Advisory Board Youth Committee, Agway, Cook College Farm and Farm Staff, Cook College Animal Science Department, 4-H Livestock Advisory Committee volunteers, Agway, and the Rutgers Cooperative Extension Department of 4-H Youth Development and Department of Extension Specialists.

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**Other base program areas this program applies to:**

Agriculture, Leadership & Volunteer Development

## Farm Fun Day Camp 2001

### **Situation:**

Farm Fun Day Camp 2001 was held daily July 9-13 from 9am- 4pm at the Washington County Agricultural Education Center.

### **Program Description:**

Farm Fun Day Camp is designed to offer youth ages 7-11, an opportunity to participate in hands-on-learning activities about agriculture. Activities at Farm Fun Day Camp focus on teaching youth about animal science, natural resources, food and nutrition, horticulture and agronomy. Farm Fun Day Camp is accredited by the American Camping Association. The first Farm Fun Day Camp was held in 1998 with 34 participants. In 2001, 74 campers and 27 teen leaders participated in the program. Approximately 95% of the campers and 50% of the teen leaders enrolled in Farm Fun Day Camp 2001 were from urban areas in Maryland, West Virginia, Virginia or Delaware. This year's program featured field trips to a dairy farm, fish hatchery, wildlife management area, vegetable garden, soil pit and orchard.

### **Stakeholder Satisfaction:**

One full time employee committed 15% of her time to coordinating Farm Fun Day Camp 2001. Three full time employees each committed 7% of their time to developing curriculum and facilitating activities for this year's program. The educational activities offered at Farm Fun Day Camp are uniquely appropriate for the program's target audience. Over the course of the weeklong program, every facet of agriculture was creatively introduced to the participants through hands-on-learning activities or field trips. All stakeholders, including those who committed resources and those who served as collaborators, were very satisfied with the success of the program.

### **Accomplishments and Impacts:**

Based on program evaluations, the program objectives were clearly met and exceeded. The following comments were taken directly from program evaluation forms completed by participants:

- "I really enjoyed the whole week and didn't want it to end."
- "I had a great time and this is my favorite camp."
- "I learned how to make a rocket, make new friends and work in a group."
- "I learned how to make a flower arrangement, plant presser and bread."
- "I liked sharing my projects with my family and I especially loved the bread!"
- "(The hands-on activities) were fun and you could show people what you did at camp instead of just telling them."

**Resource Commitment:**

Cindy's Sweets, Williamsport MD 21795; Mount Hope Farm, Hagerstown MD; Ellsworth Electric, Inc., Hagerstown MD; Purina Mills, Inc., Hagerstown MD 21740; Hagerstown Lumber Company; LeRoy E. Myers, Inc., Hagerstown MD; Washington County Commissioners; Mid Atlantic Farm Credit, Hagerstown MD; Willard Agri-Service, Marion PA;

**Collaborators:**

Frank Allnutt, Agriculture Experiment Station, Western MD Research & Education Center  
Brenda Leggett, Leggett's Dairy Farm, Boonsboro MD  
Betsy Herbst, Misty Meadow Farm, Smithsburg MD  
Michelle Trumpower, Loan Representative, Mid Atlantic Farm Credit  
Jaime Dick, Director, Washington County Recreation Department  
Lynn Little, Extension Educator  
Jeff Semler, Extension Educator  
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**Other base program areas this program applies to:**

Natural Resources Environmental Management, Nutrition, Diet and Health, Community Resource & Economic Development, Agriculture, Leadership & Volunteer Development

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*Maryland*

## **Family Day on the Farm**

**Situation:**

Cecil County MD is an agricultural county in the northeast corner of the state. There is increasing development in the county because of its proximity to Newark and Wilmington DE, Baltimore MD and Philadelphia PA. Family Day on the Farm is designed to showcase county agriculture and related programs to families in the area. The site changes each year to emphasize a different aspect of our agricultural production. Environmental stewardship practices on each farm are emphasized - an important issue in this county that sits at the top of the Chesapeake Bay.

**Program Description:**

Family Day on the Farm has been an annual event for the past 5 years. Families spend an educational and entertaining afternoon on a working Cecil County farm to learn about agriculture by interacting with their farm neighbors and agricultural agencies, organizations, and businesses. Improved relationships are fostered and participants increase the understanding of where the food

comes from. Our guests learn about the many activities of 4-H, Maryland Cooperative Extension and other agricultural agencies, organizations, and businesses.

4-H members and volunteers have been actively involved in this program from the start. Youth and volunteers do demonstrations, set up 4-H booths and project displays, conduct educational activities like farm-related crafts and ice cream making and serve as ambassadors for the county and 4-H.

**Stakeholder Satisfaction:**

The increasing success of this program is reflected in the increased number of families who attend each year. Visitors are fascinated with the "up-close" experience with agriculture. Many don't understand all that is involved in agricultural production and how important the environment is to the agricultural community. Planning meetings of staff and community members representing agricultural groups and other organizations involves others and makes this a truly cooperative county event.

**Accomplishments and Impacts:**

Family Day on the Farm 2000 featured the largest grain farm in our county, owned by William and Julian Spry. Twenty-one agriculture related agencies and organizations exhibited at the event. In addition to exhibits from five 4-H clubs, some of the exhibitors included Natural Resources Conservation Service, Soil Conservation District, Cecil County Association for Family and Community Education, Young Farmers, Farm Bureau, Emergency Management Agency, Sheriff's Department, Ag Industrial Equipment Company, Cecil County Fair Board.

County 4-H club members, volunteers and others demonstrated rabbit handling, bee keeping techniques and dog handling, as well as being in charge of several farm oriented crafts. Youth also bring 4-H animal projects for display. For the past five years, local milk cooperatives have donated milk and local orchards have donated apples that were given away. The 4-H'ers help visitors with the ever-popular plastic bag ice cream making that demonstrates that ice cream is just a short step away from farm fresh milk. At the 2000 Family Day on the Farm there was a proclamation ceremony by the county commissioners recognizing National 4-H Week.

Continuously running hay wagon tours gave participants an understanding of how soybeans and grains are utilized, how farmers protect the environment and how grain and other commodity prices are determined. The wagon tours specifically addressed situations which sometimes cause conflicts between farm and non-farm communities. The commitment of farmers to be stewards of the earth and the cost of food production (and how little of that the farmer receives) were topics the farm visitors appreciated knowing about. The children were especially amazed by the many uses of soybeans - especially the crayons!

In 2001 we will conduct our 4-H Project Day activities at Family Day on the Farm. Members will demonstrate a variety of 4-H projects so that members and non-members alike will see the many projects and activities that one can do in 4-H.

**Resource Commitments:**

Various commodity groups make donations, such as milk and apples. Grants have been received for such expenses as insurance, advertising, rest room facilities and various supplies. In 2000 the Grain Producers awarded us a grant of \$2,200. Typical cost of the event is \$2,500.

**Collaborators in 2000:**

Spry family, Natural Resources Conservation Service, Cecil Soil Conservation District, Cecil County Association for Family and Community Education, Cecil County Young Farmers, Farm Bureau, Cecil County Emergency Management Agency, Cecil County Sheriff's Department, Ag Industrial Equipment Company, Cecil County Fair Board.

**Contact Persons:**

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**Other Base Program Areas This Program Applies to:**

Agriculture, Natural Resources and Environmental Management

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*Vermont*

## **4-H/Youth Gardening Program**

**Situation:**

Many Vermonters are concerned about the quality of life for Vermont's families and communities, including health and nutrition. They are also concerned about the condition of Vermont's working landscape and its watersheds. Rural Washington county is host to several challenging issues effecting youth: isolation, obesity, poverty, family dissolution, environmental contaminants, and loss of connection with agriculture. Education that is fun and enjoyable for kids while giving them a sense of accomplishment has been shown to counteract some of these risks. Education that builds awareness of multiple issues that communities can address to enhance quality of life is even more effective. Gardening offers an opportunity for multi-faceted education. It is an enjoyable activity that links adults and children with youth development, family, community, agricultural, environmental, nutrition and food security education.

**Program Description:**

The 4-H/youth gardening program in Washington County, Vermont, involves community volunteers in teaching young people the life long skill of gardening. The program stems from a 25 year partnership with the Central Vermont, Valley and Waterbury Rotary Clubs. A program committee of Rotary members, UVM Extension Master Gardeners, parents, youth, teachers, and Extension faculty and staff planned the program. The special interest program is free to all county

youth, ages 6 - 18. Special outreach efforts were made to reach youth from families on a low income. Among the program's benefits: 1) youth learn where their food comes from 2) youth eat more nutritious foods 3) youth develop life skills 4) families have an activity to share 5) adults volunteer and connect with youth around a common interest 6) adults and youth increase awareness of natural resources involved in gardening 7) adults and youth increase awareness of hunger related issues 8) adults and youth have an opportunity to serve the community and 9) the non-farming community understands the role of agriculture in their lives.

### **Stakeholder Satisfaction:**

0.25 FTE's were committed to the project this year. Over 50 community members volunteered as workshop leaders, garden visitors, and mentors. 100 youth participated in workshops with hands-on topics like composting, planning and planting; nutrition, and exhibiting. At the end of season recognition dinner, youth will auction off some of their vegetables to raise money for next year's program. During the summer, volunteers visit youth gardens to offer helpful feedback. Youth are invited to exhibit their produce at Fairs and Field Days, and to participate in a garden mentoring opportunity. Participants receive two newsletters. Youth participate at four levels of experience: cloverbud, beginner, intermediate, and advanced. Advanced gardeners learn micro-business skills. All gardeners are encouraged to donate produce to their local food shelves and participate in the National Garden Writer's "Plant a Row for the Hungry" Program. Evaluations targeting youth participants, parents, and volunteer presenters indicated that the program was enjoyable as well as educational for everyone. Youth evaluations showed an increase in skills in gardening and beyond, for instance, business management and getting along with others. 90% of respondents indicated that they planned to "plant a row for the hungry."

### **Accomplishments and Impacts:**

A survey of parents of returning participants indicated that important changes were observed over time. Nearly 90% of respondents noted behavior changes in the areas of life skill development, nutrition, environment, and agriculture. General comments included that children are more apt to eat vegetables as a result of growing them; they were more aware of the environment and agriculture, for example, one family started composting and another was more aware of recycling. One parent indicated that her children "connect science and learning with gardening and fun. Parents cite several life skills gained by their children as a result of participating in the program, including responsibility, self-discipline, social skills, self esteem, communication, decision making, planning and organizing, goal setting, healthy lifestyle choices, community service and keeping records. Other comments from parents indicate that participation in the program brings diverse people together and gives adults and children a sense of community.

### **Resource Commitment:**

\$4000 USDA Food Stamp Nutrition Education Grant, Food and Nutrition Service, USDA.. \$1000 Vermont 4-H Foundation. \$600 Rotary donations. \$7200 in donations of seeds, plants, soil, and supplies from 15 businesses, 10 individuals, and two agencies.

**Collaborators:**

Central Vermont, Valley & Waterbury Rotary Clubs, ULM Extension Master Gardener Program, and University of Vermont Extension. Staff: part time coordinator, Michelle Manages.

**Contact Person:**

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**Other base program areas this program applies to:**

Natural Resources Environmental Management, Nutrition, Diet and Health, Community Resource & Economic Development    Agriculture, Leadership & Volunteer Development, Family Development & Resource Management

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## **Science and Technology**

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*California*

### **Animal Ambassadors - A Science Education Model**

#### **Situation:**

The Animal Ambassadors Program addresses an acute need for improved science education nationally. Results from numerous studies throughout the past decade show that U.S. high school seniors' math and science literacy are among the lowest in the developed world. Also, studies have shown that the public understanding of science in the U.S. is extremely poor. In addition, science education in the U.S. has traditionally focused on children learning the facts of science rather than engaging in inquiry-based science activities. Within the University of California, there exists an identified and immediate need for new animal science curricula, as well as more programs that engage in communities through new partnerships. The Animal Ambassadors Program was designed to address these issues.

#### **Program Description:**

Animal Ambassadors is an innovative, new youth science education outreach program. The program uses the world of animals, both domesticated and wild, as a "bridge" to help youth develop an interest in science, while emphasizing critical thinking and life skills. Animal Ambassadors provides opportunities for participation at many levels, using a cross-age teaching method in which teens are trained to guide younger children through hands-on science activities. To assist in making the curriculum activities interactive, they are organized into "loaner learning kits" that include corresponding hands-on manipulatives. The program's thematic focus helps all participants foster a foundation of care and responsibility toward animals and, by extension, toward themselves and other humans. No animals are actually used in the program.

During the first year of the program, using a "step-up" incremental training model, 4-H teens were trained over a period of several months in three sessions as cross-age teachers of the Animal Ambassadors curriculum. Their target audience was primary 4-H members (5- 8 year olds) and the same age children in local YMCA programs. The curriculum was delivered to the 5-8 year olds either on a weekly or once every other week basis. The Animal Ambassadors curriculum activities are age-appropriate and utilize a hands-on, interdisciplinary, inquiry-based approach that follows the learning cycle and emphasizes the scientific thinking processes. The program was delivered in rural, suburban, and urban settings.

#### **Stakeholder Satisfaction:**

Overall, the primary 4-H members reacted positively to the Animal Ambassadors program. About 57% of the 5-8 year olds rated the program "great," about 28% rated it "good," and about 15% rated it "fair." No participants rated it "poor" or "terrible." The teen facilitators rated the three

training sessions “very high” and “well organized.” The American Honda Foundation has funded a second year of the project, which will extend the program to three California counties and will have a target audience of 9-11 year olds.

### **Accomplishments and Impacts:**

Numerous measurement tools were used to collect data throughout the project and results were compared. A sample of the results follows:

*Goal I:* To increase the science literacy of youth ages 5-8. To test any change in children’s critical thinking skills, a pre/post performance-based analysis that utilized an object description assessment technique was used. Children were given two different objects (pre & post) and asked to describe them; the descriptions were scored using a scoring rubric.

- ! The overall average score increased 12.5% from 1.6 to 1.8. This represents an increase in the use of scientific thinking processes.
- ! Overall, the children used 20% more senses in making observations during the post-test than in the pre-test.
- ! Children were more inquisitive about the objects in the post-test than in the pre-test. They asked a total of 75% more questions about the objects.

*Goal II:* To increase family involvement in children’s science education.

- ! Forty-four percent of the children reported that they spent more time on such things as looking closely at animals and nature, discussing science and nature at home, and doing science activities.
- ! Sixty-eight percent of the participants reported that they discussed Animal Ambassadors activities with family members.

*Goal III:* To develop a state and national model for implementation and dissemination of the Animal Ambassadors Science Education Program.

- ! By the end of Session III, all teen trainers reported that they understood inquiry-based teaching methods and that the inquiry-based training impacted their lives.
- ! By the end of Session III, 95% teens reported a thorough understanding of the importance and use of open-ended questions as part of inquiry-based learning. They reported using more open-ended questions not only in their work with younger children in the program, but also in numerous everyday situations.

### **Resource Commitment:**

The research project was funded through a \$50,000 grant from the American Honda Foundation. The proposal was selected as one of eight nationally funded projects, out of more than 600 applicants.

### **Collaborators:**

The program and research project was a collaborative effort between Veterinary Medicine Extension at the University of California-Davis, and the San Luis Obispo County 4-H Youth Development Program. The San Luis Obispo County YMCA was also a collaborator.

**Contact Persons:**

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**Other Base Program Areas This Program Applies to:**

Natural Resources & Environmental Management

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*North Carolina*

## **Computer Boot Camp**

**Situation:**

North Carolina 4-H Computer Boot Camp (CBC) was designed to allow youth and adults to spend 4 days exploring computer hardware in a camp setting. The 28 participants (20 middle-school youth and 8 adults) in this summer's pilot camp built a computer from donated and purchased parts and installed an operating system (linux). The process of building the computer from component parts allowed "campers" to become familiar with electronic components, technical manuals, and complex instruction sets. By the end of the 4-day camp session, participants had a working knowledge of computer hardware and were able to install, troubleshoot, and upgrade a simple computer system. Practical classes on teaching and mentoring others, both youth and adults, were also offered. Area computer professionals visited the campers to add their expertise to the sessions and to discuss career opportunities in technology fields.

Participants left camp having spent 4 days swimming, hiking, horseback riding, canoeing, and tackling a low ropes team-building course, as well as immersing themselves in the intricacies of computer hardware. The campers took the computer they worked on back to their communities with them. Most campers kept the computers for personal/family use; a few donated the computers to community computer labs.

Participants in the program are expected to continue learning and to commit volunteer time to their communities — through offering training opportunities for others, volunteering to use their knowledge to help other groups, or mentoring youth and adults who want to learn basic computer hardware skills.

**Program Description:**

The audience was made up of adult extension agents/parents/volunteers and 6<sup>th</sup>, 7<sup>th</sup>, and 8<sup>th</sup> grade youth (ages ranged from 10 to 14). There were 8 adult and 20 youth participants and 3 instructors. Of the 31 people involved with the camp, 18 were white, 12 were African-American, and one was of Asian descent. Fifteen were female; 16 were male. Most participants came from

rural settings (communities of fewer than 20,000 people), and a majority of the youth participants came from assisted housing developments.

More than 50% of the youth participants in Computer Boot Camp did not have ready access to computer technology. Most did not have a computer at home. Few had easy computer access at school or through a library/community computer lab. There are limited opportunities to learn computer skills, especially hardware repair/upgrading for youth from rural areas of the state.

### **Stakeholder Satisfaction:**

The program was developed with a commitment of 0.5 staff FTE for 5 months. During the camp itself, a second staff member served as an assistant instructor, as did a community volunteer with specific computer knowledge. The participants were in computer-related classes for 12½ hours during the 4-day camp. Other time was spent in typical camp-related activities. Participants were very pleased with the program, and most said they would like to participate in further camps and county programs.

### **Accomplishments and Impacts:**

Pre- and post-tests were administered to the participants, asking them to identify a variety of computer hardware and peripheral components. The average increase between the pre- and post-tests was 22%, with the range of increases going from 0% to 51%. This test included such obvious parts as a keyboard and mouse, as well as memory chips, video cards and Ethernet hubs. One 6<sup>th</sup> grader scored a 39 on the pre-test, and a 90 on the post-test.

Sample comments about the camp experience (from the evaluation sheets filled out by campers at the end of the session):

- “I basically came because my sister told me I had to...boy, did I make a good decision. I enjoyed myself and learned a lot of excellent information.”
- “I love what we did. It was better than I expected. I really like CBC and will help in any way I can to expand this program.”
- “I expected to have fun and work hard. I did.”
- “ I really enjoyed the camp and will tell all my friends about it.”
- “It was more than I expected. I have gone from the weakest link to a somewhat adequate technician. Definitely can’t wait for the next program.”

### **Resource Commitment:**

The 4-day Boot Camp cost campers \$175 each. Sixty percent of the youth campers came on at least partial scholarships from their county. Camp facilities cost (facility/food/ cabin counselors/etc.) was \$150 per person. The additional \$25 went to purchase computer parts and supplies that were not donated, to create a “textbook” for campers to use during and after the camp, and to purchase tools and other materials used during the camp. After all costs were figured, the program broke even. In response to a call for older computers, individuals and corporations donated all computers used at the camp.

**Collaborators:**

The Computer Boot Camp program was developed at the state level. Some grant funds have been requested to transfer the program to the county level starting this fall.

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**Other Base Program Areas This Program Applies to:**

Community Resources & Economic Development, Leadership & Volunteer Development, Family Development & Resource Management

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*Kansas*

## Aerospace

**Program Description:**

The Kansas State 4-H Aerospace Program has changed the focus from its traditional “4-H rocketry” program to its current name. The program expands its mission from a primary focus on rockets to many other aspects that link to space. This can range from astronomy, aviation, weather, kites, and other projects that involve space. This program has very strong grassroots efforts. It was developed by youth for youth, with the extension specialist as advisor and resource. The aerospace program is somewhat new to the state. It started in 1998 and already has shown great potential. Kansas had its very first “4-H Aerospace Experience” in 2000, with more than 120 youth ages 12 and over attending. The “action team” made up of youth has already planned for the next “Aerospace Experience.” The program focuses on all youth and has brought in non-4-H’ers.

**Stakeholder Satisfaction:**

The stakeholders began with the “action team” youth, Kansas State University, the Kansas Cosmosphere and Space Center, and the state’s 4-H’ers. In less than a year, the Northeast Kansas Amateur Astronomer’s League, the Federal Aviation Agency, and the Kansas State University College of Technology and Aviation are all partners and stakeholders in this program. The success of this program has made it easy to expand the range of stakeholders. The program exhibits several excellent qualities. It provides an opportunity for youth to have hands-on experience in aerospace, as well as to look at future careers within this field.

**Accomplishments and Impacts:**

The Kansas 4-H Aerospace Program has certainly accomplished a lot in a very short time and has made a tremendous impact on youth involved, counties, the state of Kansas, and in a few cases the nation. For its first “4-H aerospace experience,” this program received calls from as far away as Florida and Georgia from individuals wanting to take part. Because of limited space, it was not

possible to include them. One outstanding happening of this program – as compared to the other 4-H programs – was that every individual who registered for the aerospace experience fulfilled their contract. There were no cancellations. A private Kansas citizen who heard the promotion asked to attend. After spending an hour at the program, the individual made a financial contribution.

Some of the comments that were made at the program:

—“(I) Definitely (have) a better and clearer understanding of the aerospace program. I felt the Cosmosphere was uniquely qualified to present aerospace information and did it in such a way that the kids were interested and stayed on task...great job.”

—“To build my first telescope and to use it was a thrill of my life..I really enjoyed it, and will come again.”

—“(I learned) educational facts on NASA and other aviation programs.”

—“I gained knowledge into Russia’s space administration like I could nowhere else.”

So great was the success of the last program that plans were made early for the “4-H Aerospace Experience 2001,” which was scheduled for November 15-18, 2001, in Hutchinson.

Other impacts included that an “aerospace day” was held in at least two counties that attended the “aerospace experience” and that calls came in from counties to consider aerospace projects for county and state fairs.

As a result of the success, two “action team” members were invited to Wisconsin’s “Air Venture 2001,” a national program sponsored by the Experimental Aircraft Association (EAA) to volunteer their expertise to teach youth to build rockets. These team members volunteered and taught more than 2,500 youth and adults to build rockets within a 5-day period. Kansas’ aerospace team is now guaranteed a leadership position in future EAA Kid Ventures.

**Resource Commitment:**

So far there has been no external funding. However, plans are in place to seek sponsors and other sources of funds to sustain this program. It is the desire of the action team not to seek sponsors until it is confident of continued success in the program. It is hoped that as the team seeks additional partners there is a possibility to ask for funding. To date the program is self-sustaining.

**Collaborators:**

Kansas 4-H Program, The Kansas Cosmosphere and Space Center, NE Kansas Amateur Astronomer’s League, Federal Aviation Agency, Kansas State University College of Technology and Aviation, a Kansas private citizen, county 4-H clubs, schools.

**Contact Person:**

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## **Youth Experiences in Science (YES) Project**

### **Situation:**

There is a growing concern about science education in California schools. Science does not enjoy the same priority as reading or math in the elementary school day, and America's disappointing performance in the Third International Mathematics and Science Study has educators concerned about science learning. Because neither the State Department of Education nor the County Office of Education collect data on science performance for elementary school students, local statistics are not available. However, an increased emphasis on reading and math in public schools has left less time for science, and teachers report an inability to incorporate the subject during the regular school day. Filling this need, the 4-H Youth Experiences in Science Project (YES) bring hands-on science education to young elementary school students in after-school settings.

### **Program Description:**

The Youth Experiences in Science (YES) Project is a hands-on science curriculum for 1<sup>st</sup> through 3<sup>rd</sup> graders. Children learn interactively by observing, exploring, and asking questions. However, instead of adults in the teacher's role, teenagers are the ones who deliver this program. The teens bring their own experiences and knowledge to the classroom – making each learning session an interesting interchange of ideas and information. This relationship between teen teacher and student makes teaching more personal for the child – providing not only a role model, but also someone from whom they can seek counsel for their problems.

The fact that teens are given the opportunity to give back to the community by teaching makes this project especially important. In Sacramento County, the YES Program is delivered in the after-school setting. By partnering with the Sacramento START Program – Students Today Achieving Results for Tomorrow – teen teachers are able to reach children in lower income areas. Since schools emphasize more on reading, writing, and math, due to statewide standardized testing, science is becoming less important in the classroom. Through the after-school program, YES brings science to children not exposed to it during the regular school hours.

### **Stakeholder Satisfaction:**

Teen teachers are grouped by proximity to a local START site. They are asked to deliver an hour of the program to about 20 children, twice a week. Depending on the START site, the children are rotated into the YES Program every few months. Within one month, a group of teen teachers would have been able to present one out of the seven science curriculums to the children. The seven curriculums in the YES Program are: Collections, Kitchen Science, C.L.U.E. (Children Looking Undercover for Energy), Worms, Bubbles, Snails, and Recycling. Each curriculum has a variety of hands-on activities that encourage the children to explore. At the end of each activity there is always "sciencing." These are questions that teen teachers ask their children to encourage further analysis of the activity.

While the children learn that science is everywhere in the world, the teens get valuable practice in public speaking and making presentations. Not only do teens learn how to prepare for their upcoming lessons, but they also learn how to work in teams while teaching. In the bigger picture, the START Program benefits from having the YES Program, by enriching the lives of the children who attend the program. One of START's goals is to provide the children a way to learn more about the Arts – Science, Art, and Language Arts. The YES Program helps fulfill the science aspect of the Arts. Last but not least, the California 4-H Program benefits from the YES Program by reaching urban and suburban areas in the state. It is changing its image from an agricultural organization to one focused on youth development.

**Accomplishments and Impacts:**

The teens gain leadership qualities because they practice leading a team while trying to teach, and they gain presentation skills by teaching 1<sup>st</sup> to 3<sup>rd</sup> graders. Lisa Kong, a 14-year-old teacher at Union House Elementary in Sacramento, felt that “teaching the children required a lot of organization...planning lessons for the month, gathering materials for each activity, and doing prep work.” She felt that presenting lessons in front of children “raised my confidence...hey, you do pick up a few things after teaching for 3 years.” On Shum, also a 14-year-old teacher at Union House Elementary, feels that he “improved his improvising skills and (gained) confidence in public speaking, prioritizing, and (being) responsible.”

Pre- and post-surveys of the teen teachers indicate that they felt more confident in public speaking and working with children, felt more positive and knowledgeable about science, increased their skills in working with their peers, and saw community service as positive and important after participating in the project. Although there has not been a study on how much the young children gain from the program, a comprehensive evaluation is in progress.

**Resource Commitment:**

Intel Corporation provided project funding (\$37,160) over the past 3 years. Sacramento START after-school program absorbs the salary cost of the adult staff who supervise the program at START sites.

**Collaborators:**

Sacramento START Program, Intel.

**Contact Person:**

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**Other Base Program Areas This Program Applies to:**

Community Resources & Economic Development, Agriculture; Leadership & Volunteer Development; 4-H /Youth Development

## Seeds for Larger Service

### **Situation:**

NASA-mentored experiments aboard U.S. space shuttle flights through the Space Experiment Module (SEM) Program.

### **Program Description:**

Country Centre 4-H in Sacramento is an proactive, urban club seeking project opportunities to offer its members that may provide them with life skills as well as fun. One such project, Space Science/Aerospace, took a very small project group a very long way! The Space Experiment Module (SEM) Program, originated at NASA and available to everyone, encourages creative, critical thinking for youth of all ages and is mentored directly by NASA.

A SEM is a NASA-approved experiment or group of experiments secured in the Space Shuttle's cargo bay, during launch, orbit and re-entry. Eight 4-H members, aged 8 to 16, spent 2 years learning about space science/travel, beginning with building simple rockets they could launch in the park, learning concepts of thrust/drag/ lift/gravity and the importance of fins in directional control. They participated in two simulated missions at the Challenger Learning Center in Sacramento. In August 2000, this group's experiment proposal was accepted by NASA. Yeast, adhesives (Band-Aids, Post-it Notes), film, and seeds were weighed on a gram scale, measured with calipers and micrometers, and packed and shipped to NASA to be integrated into Space Shuttle DISCOVERY STS-102 for launch on March 8, 2001. From August 2000 forward, all eight youth and their families worked at warp speed studying and hypothesizing what the effects of solar radiation, vibration, and extreme cold/heat might have on the specimens. At this same time, the youth started asking if they could go to Florida and actually SEE the launch. With a flurry of press releases, the parents of this group worked with the youth to publicize their project and create community interest. The group met almost weekly to immerse themselves in hands-on experiments and training (wing stress, model shuttle building, astronaut training, seed growth, travel plans, etiquette/manners instruction, and team building). Expectations were to share the experience and knowledge gained with the public in every appropriate venue.

### **Stakeholder Satisfaction:**

Target audience for this program was not specified beyond "general public." At fairs, schools, and museums, the project youth provided materials for and facilitated visitors in planting a "MINI HYDROPONICS GARDEN" and building "POP ROCKETS." Program qualities included a myriad of hands-on science appropriate for ANY age and the empowerment to go far beyond average space study. This project was run entirely by actively involved volunteer leaders, youth, and parents who were willing to be creative, committed, flexible, open-minded, and resourceful. As this project ages, curriculum becomes more readily available and can easily be modified to meet the grade/age appropriateness of the youth involved. Media focus and community involvement is also paramount to success.

**Accomplishments and Impacts:**

The Country Centre 4-H Club Space Science Project has helped, through public appearances, local and national print media, national television, radio and Internet coverage, to inspire millions of people to explore the science of space and the space flight program. Funding allowed 12 days of travel, first to Washington, D.C. for private tours of the Smithsonian Museums, the U.S. Capitol and White House, National Zoo, Arlington National Cemetery, the National Archives, and a reception at the National Grange Headquarters.

In Florida, these 4-H members were honored to serve the nation at the Apollo One National Monument by spending a day cleaning and painting the Apollo One launch site and surrounding area. They were present for a sunrise shuttle launch on March 8, 2001, and spent a day touring the entire Kennedy Space Center (KSC) compound, even spending 30 minutes with Roy Bridges, Jr., former astronaut and current KSC Director.

These youth shared information with the Sacramento County Fair and California State Fair, interacting with visitors and at many schools, sharing not only their experiences but also hands-on experiments. They were featured speakers at the Kennedy Space Center immediately following the March launch. They have been featured guests exhibiting their science display boards at the Discovery Museum Challenger Learning Center in Sacramento (three times), the Explorit Museum in Davis, CA, and the Davis Star Show. They have shared experiments with park visitors at Fairytale Town, in Sacramento, planting space seeds in the garden there so that visitors can compare the growth rates of “earth” seeds vs. “space” seeds. (WOW! Are those tomatoes radioactive?)

In all instances, these youth have respectfully handled speaking engagements, intense media attention, and long hours, like the pros they have become. They have lobbied before the Sacramento County Board of Supervisors for travel funding and before the California Assembly Education Committee requesting funding for the California Challenger Learning Centers. Because of the nature of this project, the 4-H members look forward to a least another year of data analysis and on-going contact, not only with NASA and the local community but also with the support of many local businesses.

**Resource Commitment:**

Funding in the amount of \$48,000 was raised to support the immense expense of this project. Monies were budgeted to pay for public education, travel, and project expense. The Sacramento County Board of Supervisors, \$25,000; GenCorp/Aerojet, \$9,000; Discovery Museum/Challenger Learning Center, \$500; Lambeth Trucking, \$1,000; WalMart, \$2,000; and private donations, including from families involved, provided financial support.

**Collaborators:**

NASA, Kennedy Space Center, Supervisor Illa Collin, Grateful Bread, UCD and UCD Medical Center, Challenger Learning Center, Ferrari Color, and California State University Science Department all partnered with the group, offering hours of professional guidance and interest. The Country Centre 4-H Space Science Project has made presentations to NASA, California Lt.

Governor Bustamonte, Secretary of Foreign Affairs Michael Flores, Senator William Morrow, Assemblyman Anthony Pescetti, The Sacramento County Board of Supervisors, and GenCorp/Aerojet.

**Contact Persons:**

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**Other Base Program Areas This Program Applies to:**

Agriculture; Leadership & Volunteer Development

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*Georgia*

## **Focus On Photography**

**Situation:**

This program involved the three county cluster of Liberty (population 60,905), Long (population 9,184) and McIntosh (population 10,345) Counties. McIntosh and Long Counties are extremely poor, ranking 155 and 156 out of 159 Georgia counties in wealth. Over 60% of the youth in McIntosh County receive free or reduced lunches and breakfast. Liberty County is ranked much higher in income due to the military base located within it's borders.

Advisory committees/boards in each county wanted a summer program that kids could enjoy and would cut across interest barriers. All 4-H projects need photographs/pictures as supporting material for portfolios / record books. Therefore, having a photography day camp was recommended.

In our 4-H program cluster, teens have limited access to advanced technology training McIntosh and Liberty County are ranked among the poorest in the state on a per capita income basis. This forced agents to seek outside funding, which led to securing grants for the project.

**Program Description:**

The objective of this program is to help expose rural, socioeconomically deprived youth to advanced digital imaging equipment, graphic arts software and computer enhancement capabilities. Youth participants - the target audience- will be enhanced by providing expanded summer day classes. Day camps were held for the youth, and registration numbers were kept small to assure hands-on computer use. A PowerPoint presentation was created and given to youth on how to create their own PowerPoint presentation and how to alter digital images. Youth were given Polaroid® cameras to take pictures and took turns taking pictures with digital cameras. The participants used computers to retrieve, edit and print their digital photos. Polaroid® pictures were used to make a collage.

The participants learned about the different types of photos and then searched through magazines to find examples of each. They cut out these examples, mounted them in their study guide and wrote the definition for each.

**Stakeholder Satisfaction:**

This project involved Extension personnel from the three counties including 4-H & Youth Agents, 4-H program assistants, and a high school art teacher. The workshop was conducted in a single day as a "day camp".

**Accomplishments and Impacts:**

The photography program was a large success. Forty-two youth participated in the workshops. Youth gained hands-on experience using cameras in the field. Since workshops were conducted in a single day, Polaroid® cameras were used in the interest of time. The 4-H'ers spent the first half of the day learning to use the cameras and taking pictures. The second half of the day was utilized to create picture stories or picture collages. The post-pre test verified that students' overall knowledge increased by 92%. Donors were impressed by the impact of sharing activities by the youth through their participation in photo exhibits and photo entries into the Georgia National Fair. Due to the success of the program, and its visible impact, it was continued for this year.

The program was started with a mini-grant and was funded by the same grant again this year. A second organization awarded an additional grant this year to help expand the program through the additional of digital enhancing education and the development of supporting curriculum. Through these grant funds, a supply of equipment and materials has been accumulated which will allow the program to continue in the future. Youth are also charged a nominal fee to cover cost of film. Ongoing program efforts include a roving Art Fest for participants to display their photographic art and ten winners in each county will win an expense-paid trip to the Georgia National Fair to view their entries. 2,900 youth received a brochure in all three counties advertising the Summer 2001 day classes. This brochure was funded by an additional award from one of the granting agencies.

**Resource Commitment:**

Funds provided through grants acquired from the Golden Isles Arts and Humanities Association and the Electric Membership Corporation of Georgia.

**Collaborators:**

McIntosh County Extension Office, the Liberty County Extension Office, Long County Extension Office and a Brunswick Georgia High School Art teacher.

**Contact Person:**

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## **Technology Forum (During Teen Conference)**

### **Situation:**

Telecommunications offers residents of Idaho the opportunity to overcome great distances that separate them from their neighbors, their communities, and the cities and markets beyond. Yet, telecommunication systems, like most systems, are more difficult and expensive to develop in rural areas. The fiber optic cables must cover greater distances in Idaho and the training people need to use the system is not always available. Both the infrastructure and the training need to be in place for rural residents to take full advantage of telecommunications and the Internet. Albertson's Foundation in Idaho is providing some computers to school districts and the library systems are developing computer systems available to the community. Idaho is developing their capacity for telecommunication systems in their communities. However the systems will not be put into use until training of community members takes place. Through the Idaho 4-H program (Idaho Technology Leadership Team) and the Idaho Rural Partnership (Internet Masters Program) we are trying to make training available by training volunteers across the state in various aspects of technology. They in turn would train other community groups in how to use the technology available to them.

### **Program Description:**

The University of Idaho Cooperative Extension System (CES) partnered with Idaho Rural Partnership (IRP), Qwest, the University of Idaho Information Technology Service (ITS) Department, the Video and Distance Learning, the School of Communications, the Center for Teaching Innovation, the Industrial Technology Education Department, and the Agriculture and Extension Education and Communication Department to Bridge the Digital Divide by sponsoring a Technology Forum in Moscow, Idaho in June, 2001 during Teen Conference. Participants are teens from 14-19 years of age and adult volunteer leaders. The forum is a week-long, hands-on experience where teen and adult volunteers learn basic technology concepts such as web page design, PowerPoint, concert theatre technology, adobe PhotoShop, Internet presentations, robotix, rocketry, elementary engineering, and computer simulations. These workshops are taught by professionals from the University of Idaho faculty and volunteers, University of Iowa and Missouri faculty, and Lone Eagle Consulting. The Idaho Technology Team offered a share fair where teens and adults could try out some of the latest technologies and share their experiences with others. In addition to computer lab experiences and hands-on application, teens and adults can apply their new technology knowledge by planning and implementing their community action plans during the next year.

### **Stakeholder Satisfaction:**

The major stakeholders Qwest and the University of Idaho Endowment Board provided camp scholarships to a majority of the participants. The scholarships allowed the forum to reach youth that are affected by the digital divide and who would have been unable to attend. With the continued support of these stakeholders we will be able to bridge the digital divide utilizing teens

and adults to provide education to their own communities.

**Accomplishments and Impacts:**

The 2001 Idaho Technology Forum included 72 teens out of a total of 267 attending Teen Conference. Evaluations of each class were conducted that looked at class content, ability to use in their community, organization of class and instructor quality. This was the first year to offer an in-depth technology forum and the evaluations demonstrated the interest, motivation and enthusiasm of the classes by teens. It was determined that all classes with the exception of one should be offered in the future. The one that was selected out was a workware class that is taught in a lot of high schools. All of the teens indicated there were knowledge gained and their comments ranged from;

"I learned how to follow directions, how to work with Kinex, how to make a bridge using Kinex, what designs make the strongest bridges, and how to use triangles to make stronger bridges"

"I learned how to build and program a robot, how to experiment and troubleshoot with a robot, how to design a robot, and how to problem solve in a group".

" I learned how to run a city; play games that simulate real life problems, how to build a city, the importance of economy in relation to populations, what it takes to make money in business, how to manage money, and how to think beyond the game".

**Resource Commitment:**

The per camper cost to attend Teen Conference is \$175.00. Thirty-three of the teens and 2 adults were on full or partial scholarships representing 15 counties in Idaho. Major contributors to the success of the forum include: University of Idaho 4-H Endowment Board (\$375.), Qwest (\$2,500.).

A total of 16 different technology classes were offered in 50 minute to 3-hour blocks of time over a period of one week. A total of 12 instructors (some were Technology Leadership Team Members) taught the classes. Each Technology Team Member (total of 11 teens) had responsibilities to classes and instructors throughout the days.

**Collaborators:**

The success of the forum is largely due to the undying commitment of our faculty and the support of Qwest through camper scholarships and the efforts of the University of Idaho Faculty in the Departments of Education, School of Communication, Agricultural Communication and Industrial Technology Education. Thank you to the Idaho 4-H Endowment Board for funding support.

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**Other base program areas this program applies to:**

*Indiana*

## **Cardinal Ritter 4-H Series Program**

### **Situation:**

SERIES (Science Experiences and Resources for Informal Education) is an educational program developed to provide instructional experiences that focus on increasing science literacy and the application of science and technology. SERIES goals and objectives are:

- To increase an understanding of science, productivity in creative thinking, and skills for obtaining and analyzing scientific information
- To use operational processes of science; observing, communicating, comparing, classifying, relating, inferring and applying
- To encourage youth to use the problem solving approaches of science in their personal decision making as citizens of our society
- To train teenagers and develop their ability to share concepts and processes with youth in grades 3 to 5.

### **Program Description:**

Through the 4-H SERIES Program, seven Cardinal Ritter High School students have developed presentation and teaching skills and have exposed elementary students to the fun of science. The Cardinal Ritter 4-H SERIES Team presents lessons on Animal Ambassadors, Water Riches, Electricity, Chemicals Are Us, Beyond Duck & Cover, What's Bugging You, and Rivers to Ridges.

### **Stakeholder Satisfaction:**

This is the 2nd year for the Cardinal Ritter 4-H SERIES Team with 4 of the 7 team members returning from the prior year.

### **Accomplishments and Impacts:**

From October 2000 to March 2001, the team members have given 17 presentations to 380 elementary school students. Lynette Goldsberry, a 3rd grade teacher at St. Monica's reported "My students really enjoyed learning the different parts of bugs. They were eager to answer questions and loved 'walking' like the different bugs. The instructors were enthusiastic, patient and fun." Cathryn Loe, a 4th grade teacher at All Saints commented "the Ritter High School students do a yeomen's job with primary kids. The secondary students are well-prepared, organized and clever. The primary kids enjoy them very much."

The seven team members themselves gained science knowledge and presentation skills. Their experience with the SERIES program has affirmed several of the high school student's aspirations to become teachers themselves.

**Resource Commitment:**

1. County Appropriation from Marion County Government
2. Grant for supplies from Marion County 4-H Clubs Inc.

**Collaborators:**

Cardinal Ritter High School  
St. Susanna Elementary School  
St. Christopher Elementary School  
All Saints Elementary School  
St. Monica Elementary School

**Contact Person:**

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*Indiana*

## **Teaching DNA Extraction Procedures**

**Situation:**

Biotechnology, especially the molecular manipulation of living organisms, holds great promise for agriculture. The technology is relatively new so it has not been introduced in the public school systems, and few teachers have any training in biotechnology. Furthermore, because these new procedures rely on highly specialized scientific processes, many citizens do not understand the techniques involved.

**Program Description:**

Two DNA Extraction kits were put together for use by county CES educators in workshops, classrooms, and other educational settings. The kits contain the equipment and instructions needed to perform the basic DNA extraction.

**Impact:**

These kits were used during a science workshop for 4-H'ers at Purdue in June 1998 and at the Farm Progress Show in September 1998. A great deal of interest was generated in both the specific procedure and biotechnology in general. During the Farm Progress Show we received more than 300 requests for the experiment directions. Many teachers were interested in presenting this activity in their classrooms and students often asked about adapting the DNA Extraction Activity for Science Fair exhibits. Furthermore, some European show visitors expressed surprise and interest that this educational effort was undertaken, because biotechnology is much more controversial in Europe than it is in the U.S.

**Resource Commitment:**

Funds to put the kits together were provided by the 4-H Foundation and workshop fees from the 4-H Science Workshop.

**Collaborators:**

None

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*Indiana*

## **4-H Members Fight Plant Invader, Learn About Exotic Species**

**Situation:**

Purple loosestrife is a fast-growing plant that animals don't eat. The plant's seeds are too small even for birds. The plant crowds out native plantlife and makes areas less habitable for wildlife.

**Program Description:**

Illinois-Indiana Sea Grant and the Indiana environmental 4-H specialist, are teaching 4-H leaders to raise loosestrife-eating beetles (native to Europe, but not the United States) that don't harm other plants or wildlife. They've created a curriculum guide and set of activities that leaders can use with 4-H members. Working with and through 4-H leaders, 4-H specialists are teaching 4-H members to raise and release beetles that feast on the marsh-loving plant. 4-H members then track the impact the beetles have on loosestrife, estimate the amount of insect damage, count beetles, keep the data in notebooks and graph the results.

**Accomplishments and Impact:**

A few years ago, Indiana's Department of Natural Resources (DNR) staffers released loosestrife-eating beetles in lowlands in the northern part of the state. This project extends the DNR effort. The beetles halt the spread of purple loosestrife, and therefore save the lowlands for native species. By raising, releasing and tracking beetles, 4-H members learn science research skills and gain a greater appreciation for the environment.

**Resource Commitment:**

Sea Grant College Program

**Collaborators:**

Illinois, Michigan, and Minnesota

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*Indiana*

## **Increasing Teacher Understanding Of Natural Resource Topics**

**Situation:**

Teachers of upper elementary and middle school students are being required to increase student understanding of science and natural resources. Most elementary teachers are not well prepared to teach these topics because natural resource subject-matter is not generally offered in a baccalaureate elementary teaching education.

**Program Description:**

EDCE 589D Enrichment in the Classroom: Natural Resources was offered in the summers of 1997 and 1998 by Drs. Carroll and Talbert (School of Education). The three-credit course is partially taught by Purdue School of Agriculture faculty using a lecture and discussion format, through distance education (Indiana Higher Education Teleconference System) to sites around Indiana. The remainder of the class was taught using hands-on activities, field trips, invited speakers, and other exploratory learning techniques organized by CES educators. CES educators acted as teaching assistants. This local involvement by county educators allowed teachers to take this three-credit course at sites near their homes (six sites in 1997 and five in 1998). The curriculum included general topics in the study of soil, water, forestry and wildlife, and entomology.

**Accomplishments and Impacts:**

The class was attended by 53 teachers in 1997 and 43 teachers in 1998. Many teachers reported that the class introduced them to the Purdue Cooperative Extension System and staff. In fact, 94% responded “yes” to the question, “Did you learn things about Purdue Cooperative Extension Service that you did not know?”

Classroom activities and materials were also reported useful, with 100% of the students reporting that they planned to use what they learned in class. The same percentage (100%) said they would recommend this class to other teachers. In 1997 faculty members from the University of Mississippi visited the class and requested copies of the materials. These faculty members implemented a similar class in Mississippi in 1998.

**Resource commitment:**

This class was paid for by student tuition.

**Collaborators:**

None

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*Indiana*

## Why Trees Change Color

**Situation:**

Many people, both students and adults, wonder about the natural world from time to time. Why does this happen? What caused that? How does this work? Learning the answers helps capture that interest in nature and makes learning science fun.

**Program Description:**

The Purdue Agricultural Communication Service and the University's 4-H Youth Department have developed an education package for elementary teachers on why tree leaves change color in the fall.

The package "Why Leaves Change Color" is part of the 4-H Youth Science Series. It features a short video created by William Chaney, professor of tree physiology. Other materials are an educational guide containing six student activities, a news release and fact sheet discussing color change in leaves, and a color transparency for classroom use. This package was sent to all county offices and is available for purchase from Media Distribution Center.

**Accomplishments and Impacts:**

County Extension educators have utilized this resource for their own presentations as well as offering the package to teachers for their use.

**Resource Commitment:**

4-H and Ag. Communications Departments

**Collaborators:**

None

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## **4-H Technology Project-web site for 4-H Clubs**

### **Program Description:**

Interest in technology and science by elementary and secondary students has been identified as critically important by industry leaders as they look to the future. The 4-H program teaches life skills. However, the traditional program tends to exclude technology productivity, communication, and research tools. Technology skills prepare youth for success in school and life. This program also helps to decrease the digital divide for rural youth.

The Pratt County project began in 1998 as a collaboration among the First National Bank of Pratt, The Pratt Telecommunity Center, and the 4-H program. In visiting with the First National Bank they were willing to give \$1,000 to use in the program but wanted it to be something innovative and on the cutting edge. At the same time the creative minds at Pratt Telecommunity Center and the County Extension Agent had been discussing how to expand the County Fair web site and get youth involved. This all came together with the 1998 4-H Web Page Contest. The purpose was to create an opportunity for the 4-H Club members to learn more about computers, technology, the Internet with hands-on experiences. In this first year a contest was created with awards being handed out during the county fair. The web sites were posted on the Chamber of Commerce for Pratt along with information about the county fair. Those sites were only up for two months during the summer and then taken off the chamber site. Each club appointed a committee of 4-6 members and one adult. It was structured this way so that the youth would be creating the page not the adult leaders. Work was done at the Pratt Telecommunity Center facility where they had programs, graphics, Internet hook ups, and employees that could sit down with the 4-H'ers to teach them the skills. In some of the larger clubs there was so much interest in being on the technology committee and the clubs had to establish criteria for how to select committee members. Since 4-H tends to be a traditional program, this kind of interest was exciting to see. Pratt County was told, by an unofficial source that they were among the first counties where all clubs had a web page.

In 1999 the contest was continued with the only change being that only one 4-H'er from the previous year's committee could continue. The donor wanted to give as many members as possible this experience. Working concurrently was a desire to have not only the 4-H pages up all year long but a need for the Pratt County Extension Service to also be up and going all year long. In the third year of the program the donor gave enough money to get a domain name and space for a permanent site. The contest in 2000 expanded from the creation of a single page to several pages that can be linked to the opening page. Club members learned more about web pages, learn to create and post videos, how to maintain their site as the year progresses, and how to plan the site so that it become a place for club members to meet.

During 2001 the pages have been maintained and updated. 4-H'ers have done revisions either from their own home computer or from the Extension Office. These 4-H pages can be viewed at

www.prattcountyextension.com.

Skills' participants have learned include:

1. Work as a team of youth and adults
2. Communicate using a variety of media and formats
3. Learn marketable skills
4. Design and color
5. Layouts and linkages
6. Creativity

**Stakeholder Satisfaction:**

The County Extension Agent was the counsel for the project. At the beginning of the project the 4-H club committees were temporary. Now that the web pages are permanent, each club has a committee that updates the pages and keeps current information on them. This means that more and more youth have the experience of getting into the workings of a web page and learning how to manage it.

**Accomplishments and Impacts:**

When the 4-H'ers involved have been asked what they learned comments were gotten such as:  
learned how to design a web page  
learned what was involved in making it interesting  
learned how much their club had done  
learned valuable skills in building a web page which they expect to use

Shelly Stotts said "it was an enjoyable experience, learned a lot and had fun doing it." Her sister Stephanie has started her own small business and started up her own web page based on what she had learned in 4-H.

**Resource Commitment:**

First National Bank of Pratt, \$1,000 for three years

**Collaborators:**

Al Alingh, First National Bank of Pratt  
Greg Smith, Pratt Telecommunity Center  
Jeanette Siemens, Pratt Area Chamber of Commerce

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**Other Base Program Areas this Program Applies to:**

Community Resource & Economic Development  
Leadership & Volunteer Development

## Multi-State ATV Safety Program

### **Situation:**

During 1985 to 1997, 3200 ATV-related deaths were recorded for all ages. An annual average of 20,267 children under 16 years of age were treated for ATV-related injuries in hospital emergency rooms in the United States from 1995 to 1997. From 1985 through 1997, children under 16 years of age accounted for approximately 40% of the 887,000 ATV-related injuries.

In Mississippi, there were 105 deaths recorded from 1982 to 1999. Mississippi ranked 14th among those states having the highest number of ATV-related deaths. Because ATV injuries and deaths were reaching an alarmingly high number in Mississippi, Extension Specialists, Agents, and other stakeholders felt a need to implement an awareness and safety program that would help reduce the high rate of injuries and fatalities. Mississippi Extension 4-H Agents had been teaching ATV Safety in their perspective counties but felt more help was needed.

### **Program Description:**

The Mississippi Extension Service, National 4-H Council, and the American Safety Institute implemented a Regional ATV Safety Training that included participants from Mississippi and Louisiana. A 4-H Community ATV Safety Regional Workshop was conducted in Brandon, Mississippi for some 48 participants from all across Mississippi and Louisiana. Participants attended the training as teams who would travel back to their communities to help implement an ATV Safety Program that would reach users of All Terrain Vehicles. Teams consisted of at least one adult and two youth.

The design team for the program included youth, Extension 4-H employees, ASI Trainer, and National 4-H Council. A representative from the Consumer Product Safety Commission (CPSC) was also a part of the initial training. Together, this group provided a potential for several thousands to be reached in the states of Louisiana and Mississippi. Those teams attending prepared state and local action plans to address issues centered around ATV safety.

### **Impact of Program:**

Since the Regional ATV Safety Training, Extension employees in Louisiana and Mississippi have implemented ATV Safety Awareness programs in several local communities. Reports indicate more than 10,000 youth have already been reached through week-long camps, field days and safety day programs since the April, 2001 training workshop. The major points of focus were: not wearing safety helmets and other protective gear, carrying passengers, and riding on public roadways and paved roads. Those youth and adults who attended the training indicated that their own behavior had changed as it related to wearing a helmet and riding on paved roads. After contact with Louisiana and Mississippi teams, it was noted that approximately 80% of the youth and adults said they have shared ATV Safety information with others.

**Collaborators:**

The ATV Safety Regional Training was organized and supported by the following organizations and agencies: National 4-H Council, ATV Safety Institute, North Jackson Honda/Yamaha, Mississippi State University Extension Service /4-H, U. S. Consumer Product Safety Commission, Rankin, County Extension Staff, and Youth and Parents.

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*Pennsylvania*

## **Winking LEDs & Butterflies**

**Situation:**

A program was designed to introduce youth to basic electricity concepts, and to develop an interest and desire to learn more about the subject of electricity.

**Program Description:**

In collaboration with the Electrical Engineering Department at Penn State University a new program was developed to encourage youth interest in the subject of electricity resulting in the creation of an electric butterfly project. In five, 90-minute sessions students worked to create an electric butterfly. This program was presented to 15 youth, ages 6 to 12 years old. The youth involved were enrolled in the School Age Day Care Program coordinated by the Ridgway YMCA. Ridgway is a rural community located in the hills of north central Pennsylvania.

**Stakeholder Satisfaction:**

The program offered was an intensive, one week program presented to the youth by the county youth development agent and a college summer assistant, under the guidance of an engineering professor. In order to pique the interest of participants it was essential that the program be hands-on and exciting for the youth involved. This program met both of these criteria and more! Youth participated in five, 90-minute classes, Monday through Friday. Each class session was a step toward the final product—the creation of an electric butterfly. Participants were fascinated with all facets of the project; from making a circuit, using different tools to create the butterfly to the completion of the final project—an electric butterfly with moving wings!

**Accomplishments and Impacts:**

It is a fact that of the 123,220 youth enrolled in PA 4-H for the 1999-2000 year, only about 5 percent of these youth enrolled in an electricity project. The electric engineering professor involved in this project observed that many college students do not have even a basic understanding of how electricity works. It is thought that if the youth are exposed to this subject matter, in a fun, hands-on manner, this situation is likely to improve. Responses to the question, Why I liked this project, varied from, "It was really fun, we made our butterflies wings move;" to,

"It is building." Eight responded that they would be able to explain to another person how they got the wings on their butterfly to move.

One mother who came into the class on the final day commented that her daughter told her every day about what she was doing because she thought it was "so cool". The parent thought the project was equally "cool" even before she saw the completed butterfly. She felt her daughter was "really learning something."

In one county, an entire 4-H Electricity Club has been formed based on the demonstrated enthusiasm of this program.

**Collaborators:**

This program was made possible through a strong collaboration/commitment on the part of the Electrical Engineering Department of Penn State University (specifically through the leadership of Associate Professor Jeff Schiano), Penn State Cooperative Extension, the Ridgway YMCA, and the county Extension Office.

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*Pennsylvania*

## **Science Enrichment Summer Programs**

**Situation:**

The demographics of the audience is North Philadelphia, an urban economically depressed area of the city. The issues facing the target audience are lack of employment, urban blight, lack of education, language barrier (since the predominant population is Latino), high crime, and high drug use and sale of illegal drugs on the street. The grassroots efforts in the development of the program were instigated through telephone conversations, letters, and face to face contact with community leaders and activists. These encounters all focused on Penn State Extension's role in providing meaningful science enrichment programming to the North Philadelphia and West Philadelphia Asian communities at large. The expected benefits of the programs to individuals and the public are a better awareness of Penn State Extension's role in helping under served communities, (Latinos and Asians), with a variety of programming options such as science enrichment. Another important benefit is the possibility that programming participants may wish to consider science as a long-term career goal or at least to nurture an interest in science.

**Program Description:**

All of the activities in the science enrichment program require active participation by the youth. They have the opportunity to meet insects, snails, and fish up close and personal while learning to respect their habitats and ways of life. While working with insects, youth learn about their life

cycle and the life cycles of related arthropods. They also learn about insect body parts, the differences between insects and related species, respect for all living organisms, and the natural place for insects in the world. Youth also gain a better appreciation for the beauty and complexity of the natural world. The sessions on snails include hands on activities for youth to learn how snails move about and if they move differently on various surfaces, preferred snail food choices, snail movement across sharp objects, snail strength, snail training (Can they walk a tightrope?), and reactions to the environment. The youth also have the opportunity to have their snails participate in races to learn about how fast snails move and if some snails move faster than others. The sessions on fish have youths setting up their own aquariums and learning how to care for the fish.

### **Stakeholder Satisfaction:**

The frequency and participation of the target audience was two days per week with two one-hour sessions at the Lighthouse and two, two-hour sessions at Hace Caribe. Both the Lighthouse and Hace Caribe are community centers in North Philadelphia. SEAMAAC (Southeast Asian Assistance Association Coalition, Inc.) was provided with two days of programming per week with each session lasting about two hours. At all sites, the program continues for five to six weeks. The target audience at SEAMAAC was mainly Cambodian students from 14-18 years of age. The program qualities were mainly focused on a hands-on approach to learning science. Group discussion, teamwork, and sharing data were emphasized. All programs were completely hands-on with active participation from the participants. SEAMAAC and Hace Caribe teachers also participated in all activities. Students learned science can be fun. All programs were age appropriate and could be either scaled up or scaled down depending on the age and interest of the participants. The various people in charge of these centers were pleased with the quality and interest of the children and adolescents with the enrichment programming. The Lighthouse, Hace Caribe, and SEAMAAC all requested similar programming for the fall in their after school programs.

### **Accomplishments and Impacts:**

As a result of the programming, about 200 at-risk children had an opportunity to learn science through fun activities. These types of activities over the summer help to maintain learning levels of youth until they return to school in the fall. The community at large was made aware of the presence of Penn State Cooperative Extension working in their communities to help them, along with something creative for their children to do with their time. Everyone seemed pleased with the content and quality of the programs provided. Two professional teachers were always present at Hace Caribe and SEAMAAC, and were instrumental in getting the participants interested in the programs. The teachers were asking questions and helping the participants with worksheets. The teachers strongly supported the hands-on approach to learning science. The President of Hace Caribe recognized the work accomplished and how involved the students and staff were in the activities. Penn State Cooperative Extension has been invited back to do additional science enrichment programming in the fall.

**Resource Commitment:**

No external funds were generated. Penn State Cooperative Extension provided all educational materials free of charge to the participants at all sites. Materials included paper, worksheets, live snails (for Snail Circus), and insect models for "Creepy Crawlies". Also, collecting boxes were provided for all students.

**Collaborators:**

Staff from Hace Caribe and SEAMAAC, all professional teachers, assisted with the implementation of the program. Other assistants included one college student and three high school students present to assist the agent with distributing materials and helped the participants answer questions pertaining to the various projects. There were no external collaborators with the exception of Penn State.

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## **Community Service Learning**

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*Illinois*

### **4-H CAN Make a Difference**

**Situation:**

The Illinois Hunger Coalition reports that more than 1.5 million Illinois citizens go hungry each year, half of whom are children. Unfortunately, these numbers are continuing to increase. Illinois 4-H youth were shocked to learn of this large number — especially considering that Illinois is one of the world’s greatest food producers. Summer months are particularly critical for local food banks, pantries, and shelters. According to the Illinois Food Bank Association, supplies accumulated during the holiday season are typically depleted by mid-June. In addition, many families’ food budgets are stretched to the maximum during this time, as children who use government subsidized meal programs during the school year are at home. As a result, many parents must turn to food banks and pantries to make up for the extra demand on their family budgets. The 4-H CAN Make a Difference campaign calls attention to this critical need.

**Program Description:**

Each of the 1,820 Illinois 4-H community-based clubs are encouraged to partner with local shelters, meal programs, and/or food pantries to give youth a first-hand experience of the problem and determine how they can be part of the solution. Hunger information packets, club project planning guides, and “ideas that work” booklets were developed and distributed to each club. The clubs collaborate with local groups to design and implement unique hunger-related projects. The 4-H CAN Make a Difference program: 1) unites 4-H youth with individuals, civic organizations, educational groups, media, corporations, and industries in a campaign to eliminate hunger; 2) creates awareness about hunger through state and local efforts and identifies ways everyone can be part of the solution; 3) mobilizes 4-H youth and their partners to collect and distribute thousands of pounds of food for citizens in need; 4) engages 4-H youth as volunteers at local food pantries and shelters; 5) enhances youth leadership, citizenship, and communication skills; and 6) develops caring spirits in youth.

Highly visible state-level activities call attention to this important 4-H initiative. They include 4-H CAN Make a Difference food drives at the Illinois State Fair, DuQuoin State Fair, University of Illinois, National Sweet Corn Festival, county fairs, and community festivals. Hunger-related 4-H displays at these events create awareness and help citizens learn how they can get involved. During these events, 4-H youth construct a “house” made out of donated food products. The 4-H house of food symbolizes 4-H youths’ hopes that pantry shelves in every home are stocked with food. All donations are delivered to Illinois Food Banks/Second Harvest Network. The traveling exhibit includes interactive hunger-related information, games, and activities. The Illinois First Lady is Honorary Chair of the 4-H CAN Make a Difference

campaign. The First Lady's involvement expands involvement, enhances media interest, and increases visibility for the project.

**Stakeholder Satisfaction:**

The 4-H CAN Make a Difference project unites 4-H community-based clubs around a common concern. The program provides high visibility to local 4-H community action initiatives and helps to reposition the 4-H image. The program receives high marks from 4-H youth, adult volunteers, and Extension staff representatives on the State 4-H Advisory Council. Government officials, agencies, and corporations have been quick to partner with the program because of the quality of work accomplished, the high visibility of the program, and concern about hunger. Corporate and agency partners have increased participation in this project in the past 4 years. The Illinois First Lady has consistently praised the program verbally and in writing. Illinois Food Banks/Second Harvest Network presented 4-H with the Statewide Food Drive of the Year Award for outstanding leadership and contributions.

**Accomplishments and Impacts:**

Last year, Illinois 4-H youth collected more than 68 tons of food and donated more than 187,000 hours of volunteer service at local food banks, pantries, shelters, and meal programs throughout the state. Thousands of families throughout Illinois have been helped by this important humanitarian effort. Illinois Food Banks estimate that more than 110,000 hungry citizens have been fed as a result of the 4-H food collections. The number of citizens that 4-H has helped has grown steadily each of the past 4 years. A survey of 4-H clubs revealed that 84% of all youth participating in local efforts learned more about the problem of hunger and that 68% of the youth reported that they planned to continue working on this initiative.

**Resource Commitment:**

Illinois 4-H received a \$4,300 grant from Kraft Foods, Inc. to help with this unique project. The State 4-H Office provided funds for student internships to help coordinate state level activities. University of Illinois Extension 4-H marketing funds support the development of 4-H club/group educational materials, the traveling display, and promotion of the program. Illinois commodity groups, corporations, and the Illinois Department of Agriculture provide funds and in-kind contributions to assist with the program implementation.

**Collaborators:**

Illinois 4-H Ambassadors provide youth leadership for this statewide project. Food Bank and Hunger Coalition officials assist with the development of club/group materials and the traveling display. The Department of Agriculture incorporates the program as a major feature at the Illinois State Fair and the DuQuoin State Fair. Food manufacturers donate food products and provide financial support. Commodity groups provide funds to help promote the program and product coupons to encourage citizen involvement. United Parcel Service distributes promotional flyers and transports donations to area food banks. John Deere provides vehicles to transport food donations at local events. Illinois Farm Broadcasters publicize the program. Cellular One and Global Technical Services facilitate communications. Several corporations collect food items at local stores and provide product incentives and other in-kind donations.

**Contact Person**

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**Other Base Program Areas This Program Applies to:**

Nutrition, Diet, & Health

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*Tennessee*

## 4-H Seeds of Service

**Situation:**

Service learning is a growing trend for today's youth. Many schools have a service requirement for graduation, and scholarships are increasingly based on community involvement. As the world's largest youth development organization, 4-H has always been committed to helping the community. Now, however, the focus has shifted to service *learning*, a process by which youth volunteers learn and develop as they meet real community needs. Tennessee 4-H staff saw the potential for the integration of this concept into existing 4-H programming. With the help of a Learn and Serve grant from the Tennessee Commission on National and Community Service, extension personnel developed the 4-H Seeds of Service (S.O.S.) program. 4-H S.O.S. is designed as a resource to educate 4-H'ers and adults about service learning and to help them turn their community service into a true learning experience.

**Program Description:**

The target audience of 4-H S.O.S. is both rural and urban and spans the entire state. To help youth, volunteers, and extension staff understand the concept of service learning, the 4-H S.O.S. coordinator conducted workshops for more than 500 youth and adults. She also developed a website (<http://www.utextension.utk.edu/4h/sos>) devoted to service learning through 4-H. Twenty-three youth-led groups received mini-grants of up to \$1,000 to fund service projects in 18 counties. In addition to service projects conducted on the county level, statewide events such as 4-H Congress, Junior High Academic Conference, Teen Adventure Weekend, and 4-H Roundup included a service learning component.

The goal of 4-H S.O.S. is to educate and encourage Tennessee 4-H'ers to be actively engaged in service. Through service, 4-H youth can develop leadership, citizenship, communication, and teamwork skills. They also can learn more about their chosen 4-H subject area, such as horticulture or sewing. Their service efforts will reach thousands of residents in almost every county in the state.

**Stakeholder Satisfaction:**

In addition to the program coordinator, 66 FTE's committed 5% of their time to service learning and one FTE committed 10%. More than 60,000 4-H'ers conducted 1,060 service learning projects in 89 counties. This surpassed the original goal of 750 projects. Four-H'ers of all ages

were able to participate and be leaders in service activities, thereby increasing their learning experience. Most 4-H'ers reported that they enjoyed helping others, and 100% of 445 evaluated projects were rated effective by community beneficiaries.

**Accomplishments and Impacts:**

Four-H youth, adult volunteers, and staff conducted 1,060 service learning projects. Projects were categorized by priority areas, as determined by the Corporation for National Service. Tennessee 4-H'ers served in the following areas: environment (11,517 in 160 projects), health (5,925 in 96 projects), public safety (608 in 9 projects), education (2,565 in 121 projects), other human needs (20,661 in 443 projects). Nearly 20,000 4-H'ers served in miscellaneous other projects, including 22 projects for animal shelters.

A total of 64,646 4-H youth and adults dedicated more than 90,500 hours to service learning. This time is valued at more than \$466,000 if calculated by the minimum wage of \$5.15.

4-H'ers participating in service learning projects reported learning a variety of things. Some 4-H'ers learned more about their community, facts about health-related issues, how to landscape, not to litter, how to work together to help others, and how to appreciate what they have. Project groups participating in service were able to increase and utilize skills learned through 4-H project work, such as organic gardening methods or how horses are used in therapy for the physically challenged.

**Resource Commitment:**

The Tennessee 4-H program received a \$128,000 Learn and Serve grant from Tennessee Commission on National and Community Service.

**Collaborators:**

More than 4,000 Extension staff and 4-H volunteer leaders have worked to increase youth service across Tennessee. They have collaborated with other agencies, such as United Way, St. Jude's Children's Research Hospital, schools, and nursing homes to meet real community needs. Tennessee's Points of Light Foundation, YES (Youth Engaged in Service) Ambassadors, and members of the Tennessee Commission on National and Community Service have all provided assistance with training, promotion, and resources for the program.

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**Other Base Program Areas This Program Applies to:**

Leadership & Volunteer Development

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*Maryland*

## **The Art of Friendship and Service Learning**

### **Situation:**

The program's goal was to create an interesting expressive arts project for 4-H youth, ages 12-18, while providing opportunities for service learning hours.

### **Program Description:**

The Deer's Head Center, a state rehabilitation and long-term care facility was the first site piloted. 4-H youth would develop personalized ceiling murals for bed-bound residents based on the residents' interests. Each mural was composed of four 12"x12" ceiling tiles. Each tile had a separate painting which related to a specific resident. The goal was to finish the 60-mural project in two years.

The Holly Center, a state facility for mentally retarded individuals, was the second site chosen. This program was two days in length. Ten youth ages 12-18 participated in the workshop. The Holly Center provided educators an opportunity to conduct workshops that included: "What is Mental Retardation?", "Orientation to Disabilities," and hands-on simulations of specific disabilities. The hands-on experiences included simulated activities for hearing, speech, visual (including dyslexia), and physical disabilities. Teams of two youth were assigned to interact with Center residents. These individuals required the highest level of care that Holly Center provides. (Holly Center refers to their residents as individuals.) Youth interviewed the nursing staff, researched personal history, and conducted a visual experiment. The purpose of the experiment was to watch for response to visual stimuli. Youth compiled results and created a personalized 20"x24" canvas painting for each individual. The paintings will be hung over each individual's activity area.

### **Stakeholder Satisfaction:**

The Deer's Head Center component of the project meets one time per month for 1½ hours. The Deer's Head Center staff has expressed high satisfaction with the murals and are funding the cost of all materials for the 60 murals. Ninety percent of youth are continuing with this project. The Holly Center sent a written statement of high satisfaction with the results and ten completed paintings. The youth expressed satisfaction with this project.

### **Accomplishments and Impacts:**

Six completed murals, which include 24 high-quality individual paintings, are completed and were hung over six residents' beds at Deer's Head Center. Four-H'ers have completed 120 hours of community service. One hundred percent of youth expressed that they felt more comfortable interacting with individuals with disabilities. An appreciation ice cream party was given for 4-H youth by Holly Center.

### **Resource Commitment:**

Both facilities funded the program.

**Collaborators:**

Deer's Head Center, The Holly Center, Wicomico County 4-H Youth Development Program.

**Contact Person:**

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*Mississippi*

**TEAM (Therapeutic Riding Activity Member)****Situation:**

In the state of Mississippi there are more than 500,000 people with some type of disability. Therapeutic riding is a specialized equine activity that provides physical, emotional, and psychological benefits to individuals with special needs. Through carefully planned activities developed by a health professional and a certified riding instructor, the horse is used as a treatment tool to help the rider achieve his or her goals. With the increasing awareness of the positive benefits of therapeutic riding, many individuals, civic groups, and therapists are seeking guidance in developing a therapeutic riding program in their community.

**Program Description:**

The Mississippi State University Extension Service's 4-H TEAM is a program that promotes therapeutic riding through educational and research-based activities. The goal of the TEAM program is to develop a model therapeutic riding center based on North American Riding for the Handicapped Association (NARHA) guidelines, which regulate consistent safety and professional standards. Individuals of all ages and disabilities can benefit from therapeutic riding. Four-H clubs can provide the necessary volunteer services for programs and benefit from their experience at the same time.

**Stakeholder Satisfaction:**

The community, state, and Southeast region have welcomed the leadership that TEAM has provided in the therapeutic riding profession. The state has had three new centers open statewide this year, and its state membership in NARHA has doubled.

**Accomplishments and Impacts:**

The Mississippi State University 4-H TEAM hosted the NARHA Region Five Conference in August 2001. More than 100 instructors, health professionals, parents, and volunteers from 7 states attended the 3-day conference, which consisted of 10 workshops and demonstrations on therapeutic riding. The TEAM program hosts two 8-week riding sessions a year, with a minimum of 10 riders, 20 volunteers, one riding instructor, and two physical therapists. The region five volunteer of the year for 2001 was selected from the TEAM program.

**Collaborators:**

MSU Extension Service, Oktibbeha County Hospital, 4-H agents and members, North American Riding for the Handicapped Association

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*Kentucky*

## **Child 2000: Youth Development Partnership**

**Program Description:**

A private-public partnership between the Kentucky 4-H program and Kentucky Child Now! provides the foundation for bringing together key stakeholders to address the needs of Kentucky's young people. The Partnership is a collaborative effort with over 20 state agencies, private non-profit organizations and community-based organizations working to promote Positive Youth Development and collaboration at all levels across the commonwealth. The target audience for the Partnership includes state agencies, community-based youth service providers, community leaders and young people.

The vision for the partnership is: Youth are respected, valued, and have access to the resources, opportunities and support they need to be healthy and successful. The goals for the Partnership are: 1) **YOUTH INVOLVEMENT:** Youth are involved in the planning, governance, assessment, and delivery of youth policy and services. 2) **COMMUNITY AWARENESS:** Youth, families and communities have knowledge of positive youth development and the skills and ability to build healthy and successful youth. 3) **A NETWORK OF SUPPORT:** Youth support system will have the support of a statewide network to facilitate coordination, collaboration, and communication. 4) **TRAINING & TECHNICAL ASSISTANCE:** Youth support system will have access to training, technical assistance, and resources to support and implement the youth development approach. 5) **YOUTH POLICY:** Kentucky will adopt state-level youth development policies based on the youth development approach.

No one sector, acting alone, can ensure that all young people acquire the competencies, character and protection they need to seize the opportunities that lie ahead. It is a team effort and everyone has a role to play.

**Stakeholder Satisfaction:**

4-H has one and one half FTEs committed to the implementation of this project, of which one is funded through a federal grant. The Partnership Task Force, made up of twenty organizations from the state and local levels, meets on a monthly basis with and provides leadership and planning for the Partnership. Activities fall under each of the five results; Youth Involvement, Community Awareness, A Network Of Support, Training & Technical Assistance, Youth Policy, and are tailored to address the four target audiences; state agencies, community-based youth service providers, community leaders and young people. Activities are based upon expressed needs through focus groups and needs assessments conducted with the target audiences, and evaluations have been very positive expressing great stakeholder satisfaction with services. Recurring participation in workgroups and special events have been high, also denoting high satisfaction with the efforts of the Partnership activities.

**Accomplishments and Impacts:**

Major accomplishments of the Partnership has been the strengthening of relationships and strategic focus of the Partnership which has resulted in expanded scope and participation on the Task Force and increasing potential impact of promoting positive change in the outcomes. The implementation of the Search Institute's Developmental Assets survey on a statewide basis has resulted in the development or strengthening of community efforts in twenty-two communities across the state. A recent workshop on youth adult partnerships, interpreting survey results, and developing communication plans has led to more sharing of resources and tools among community efforts. The publication of an eight-page "Spot Light Youth" brochure has highlighted community efforts and over fifteen thousand have been distributed to individuals throughout the commonwealth.

**Resource Commitment:**

The Partnership is funded through a U.S. Department of Health and Human Services, Administration on Children and Families, Family Youth Services Bureau, State Youth Development Collaboration Demonstration grant for a three-year period for \$120,000.00 per year.

**Collaborators:**

Members of the Partnership includes: Kentucky Department of Juvenile Justice, Kentucky Child Now!, University of Kentucky Cooperative Extension Service 4-H Department, Office of Family Leadership, Department of Mental Health/Mental Retardation, Volunteers of America, Cabinet for Families & Children, Kentucky Agency for Substance Abuse Policy, Sign of the Dove Church, Kentucky Commission on Community Volunteerism & Service, Partners for Youth Foundation, Kentucky's Youth United, Office of Family Resource and Youth Service Centers, Kentucky Office of School-to-Work, Cabinet for Health Services, Kentucky Department of Education, YMCA National Safe Place, and the Girl Scouts Wilderness Road Council.

**Contact Person:**

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**Other Base Program Areas this Program Applies to:**

Community Resource & Economic Development, Leadership and Volunteer Development

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*Maryland*

## **4-H: Make a Difference Program**

**Situation:**

In Caroline County the Caroline County Human Services Council provides opportunities for community based agencies to apply for grant funds to support youth/families. By taking advantage of funds provided by a small grant the Caroline County 4-H Educator and Program Assistant have included ninety-five 4-H members in the program. Youth gave of time and talents to make a positive impact in our county. Following the specified outcomes in the grant youth learned CharacterCounts! issues and became better students and members of their family unit by practicing being respectful, using good manners, etc. Additionally, 4-H members learned new skills as they served others.

A series of “Make A Difference Day” events was held. Many tasks were accomplished as youth and adults worked together. 4-H members learned skills in character issues, woodworking, electricity, sewing, nutrition and kitchen science. Through hands on experiences 4-Hers gained skills in team work, cooperation, problem solving, and contributing to a group effort.

**Program Description:**

The rural audience included ninety-five 4-H members, twenty members of the Choptank Ruritan Club, fifteen members of the Caroline County 4-H All Stars, and the 4-H county extension faculty and staff.

The 4-H Park belongs to the county and is in great need of a variety of repairs, house cleaning, and improvements. 4-H youth use the facilities free of charge, on an ongoing basis and have traditionally held a sense of pride in helping to maintain the facility. The need is always great to make improvements. This grant provided for making repairs to tables and chairs, cleaning and painting cabinets, cleaning kitchen utensils and repairing exhibit display cases housed at the park. Complete cleaning and painting of storage cabinets in the kitchen/ workroom area helped to conserve supplies and plan for future needs. Several sewed lap robes for patients in the local nursing homes as a means of thinking of the needs of others.

Twenty-five 4-H members made posters to hang in locations around the county emphasizing the pillars of character and the need for all to be good citizens.

**Stakeholder Satisfaction:**

The 4-H Educator and program assistant provided time on an as needed basis. Both were in attendance at each of the four “Make A Difference” programs. The participants varied from helping each time to only attending one session. Every participant gained personal satisfaction in accomplishing some task to make the county 4-H Park a better place.

**Accomplishments and Impacts:**

4-H members each earned an average of 15 hours of community service as they worked on various projects. Youth participants earned great satisfaction in working with the 4-H All– Star and Ruritan members. The adults gained a better awareness of the willingness of the 4-H members to learn life skills.

**Resource Commitment:**

The grant from the Caroline County Human Services Council provided \$500 for “Make A Difference” events. The money paid for cleaning supplies, paint, goggles to protect eyes, electric and woodworking supplies. Additionally, funds were used to purchase poster board and supplies to make posters. Shrubs will be purchased and planted this fall to enhance the landscaping around a new meeting building at the park.

**Collaborators:**

Volunteers listed above staffed the program. It is interesting to add that county officials also helped to repair and improve the facilities as we worked together to make improvements (county treasurer, and the county administrator).

**Contact person:**

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**Other Base Programs this program applies to:**

Leadership and Volunteer Development, Community Resource & Economic Development

## Impact of 4-H Service on Communities

### **Situation:**

4-H has a long tradition of providing community service opportunities for youth and volunteers, yet no effort had been made to determine how much service is actually done or what the quantifiable value is of that service. Extension staff was asked to collect summaries for a 12--month period from volunteers regarding service projects conducted and the number of youth and adults involved and the amount of time spent on those projects.

### **Accomplishments and Impacts:**

Based upon the US Department of Labor minimum wage, the 217 4-H clubs that reported service hours made a \$5,489,274.28 impact on Oklahoma communities. The survey of Oklahoma 4-H clubs indicated that 4-H members and leaders make significant contributions to their communities through community service projects.

Of the 77 counties in Oklahoma, 58 (75.32 percent) reported community service projects during the reporting period. Those reports represented 1,308 total service projects that involved a total of 19,001 4-H Youth. As there were 21,646 members enrolled in community 4-H clubs at the time, it can be assumed that many youth participated in multiple projects during the reporting period and that many did projects that were not reported. Of the state's 936 recognized clubs 23.18 percent (217) of the clubs submitted one or more reports. Forty-three of the counties that submitted reports provided 40 or more entries or activities.

### **Stakeholder Satisfaction:**

The findings of the study indicate that many 4-H clubs actively conduct community service projects as a part of the total 4-H learning experience even though some clubs appear to do significantly more projects than do others. One county submitted reports that summarized 123 different activities while others reported only one.

The reports indicate that the promotion of food and fiber is an important part of the 4-H experience for some youth in Oklahoma with those who participated in this area recording large numbers of hours. While this topic had the largest number of hours reported, it was discovered that in selected counties this was attributed to a few major projects such as learning labs and demonstrations at fairs and other events.

Some of the other projects that involved large number of youth included working with children and youth, helping the disadvantaged, and promoting safety and healthy living, and helping people with disabilities.

Leaders played a major role in supporting youth in clubs. The study showed that they provided large numbers of hours in supporting the 4-H program in general with 1,881 reports representing 15,885 hours of service related to this area.

Less than 1/4 of the 4-H clubs in Oklahoma actually submitted reports. It is not known if the non-respondents were similar to those who reported or if they did more or fewer projects. The impact reported is great and is only possible as a result of the contributions of time and other resources by both salaried and volunteer staff.

**Resource Commitment:**

No new funds were required. Educators and volunteers were asked for a commitment of time in order to collect and report the data.

**Collaborators:**

County staff and volunteers who submitted data. Graduate faculty in the Department of Agricultural Education Communications and 4-H Youth Development at Oklahoma State University.

**Contact:**

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**Other Base program areas this program applies to:**

Community Resource and Economic Development

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## **School-Age Child Care**

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*Kansas*

### **Learn and Serve 4-H**

#### **Situation and Program Description:**

Douglas County's Learn and Serve After-School 4-H Clubs use the motto "Making the Best Better." This is a way to take the best of 4-H work and to deliver it by a new method. When working with today's youth, the traditional methods of delivery are not always appropriate. It becomes important to use creative, innovative delivery methods that are designed to reach the particular needs and characteristics of your audience.

Learn and Serve 4-H Clubs are located in three sites in Douglas County. The sites that they serve are Kennedy Elementary, Pinckney Elementary and the Douglas County Youth Center. These three school youth programs are built around three basic components: education, community service, and mentoring. The project is cosponsored by the schools, the community neighborhoods, and the business education partner of schools. Douglas County Extension is responsible for programming, and the schools are responsible for providing the facility and one volunteer for every 10 youth who are enrolled in the program. The Learn and Serve 4-H club's volunteers are parents, a registered nurse, Kansas University Students, and a professor who is originally from Japan.

The population of Douglas County is 81,798 with 20.5% under the age of 18. The median family income is \$35,631. At Pinckney Elementary School, 51.3% of the youth qualify for free or reduced lunches, while 72.5% of the students at Kennedy Elementary qualify. The percentage of children between the ages of 6-17 with both parents in the workforce is 54.17%. The percentage of births to single teens is 6.2%.

#### **Stakeholder Satisfaction:**

Learn and Serve 4-H works with about 70 children and youth in an out-of-school setting, helping them gain life skills that can be used in the classroom, family, and community.

According to Deci and Ryan (1985), if the basic needs of social connectedness, self-determination (i.e., autonomy), and competence (i.e., mastery of skills and opportunity to demonstrate that mastery) are met, the children will likely be healthy. These fundamental elements are found in all healthy places that build healthy youth.

In addition to researchers such as Deci & Ryan, other youth development experts have identified environmental elements necessary for youth to be healthy. The National Impact Study Workgroup (1998) established a list of eight critical elements critical for any organization, program, or "place" to be healthy for youth. These are:

- \$ A positive relationship with a caring adult
- \$ A safe environment
- \$ Opportunity for mastery
- \$ Opportunity to value and practice service for others
- \$ Opportunity for self-determination
- \$ An inclusive environment
- \$ Opportunity to see oneself as an active participant in the future
- \$ Engagement in learning

Learn and Serve 4-H includes these eight critical elements in their program and reports quarterly on how they are creating a healthy place for children and youth. Recent submissions include:

- \$ Positive relationship with a caring adult – “Children have come to rely on Learn and Serve as a constant, dependable part of their lives. They come eager to share, knowing that Mrs. Schmidt and the volunteers will listen and care.”
- \$ Opportunity for self determination – “Youth are given choices as to what craft projects they want to do and what recreational activities to participate in, and as always they make their own choices on what kind of behavior they display for the day. Mrs. Schmidt and volunteers are great about reminding the youth of their ability to self-determine their behavior.”

Learn and Serve strives to provide the best place for children to learn and grow.

**Accomplishments and Impacts:**

Primary outcomes for youth who are enrolled in the project:

- |                          |                                     |
|--------------------------|-------------------------------------|
| \$ leadership skills     | \$ critical thinking                |
| \$ increased self-esteem | \$ communication skills             |
| \$ valuing diversity     | \$ relationship skills              |
| \$ problem solving       | \$ personal safety                  |
| \$ goal setting          | \$ social/environmental navigation  |
| \$ decision making       | subject matter skills and knowledge |

The community has seen the great things that Learn and Serve 4-H has provided for their children and youth. Lawrence Unified School District included Learn and Serve 4-H in their recent grant proposal for the 21<sup>st</sup> Century Community Learning Center. The grant was funded. Learn and Serve 4-H and FNP, which was present in two of the four elementary schools, will expand to serve 2 new sites with additional funding from the 21<sup>st</sup> century grant. Extension will provide 6 hours of programming for the four schools per week. The four major partners in the 21<sup>st</sup> Century Community Learning Center are Extension, Regional Prevention Center, Arts Center, and The School District.

**Collaborators:**

Kennedy Elementary School, Pinckney Elementary School, Douglas County Youth Service Center, Regional Prevention Center, Arts Center, School District.

**Contact Person:**

Trudy Rice - Douglas County Site Director, 2110 Harper Street, Lawrence, KS 66046.  
Phone: 785-843-7058, Fax: 785-843-6745, E-mail: trice@oznet.ksu.edu

**Other Base Program Areas This Program Applies to:**

Family Development & Resource Management

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*Maryland*

## **Babysitting and Parent Helper Program**

**Situation:**

“Babysitting and Parent Helper Program” was developed to teach youth ages 13 and older to become more responsible, reliable, dependable, and effective babysitters. The Parent helper portion is for youth ages 9-12 and trains these youth with skills to assist their parents with younger siblings or relatives.

**Program Description:**

The Babysitting and Parent Helper Program is targeted to all youth in the county. The program is held in partnership with the Baltimore County Public Libraries. The Libraries and the Extension Office share responsibilities in advertising the program. Participants in the workshop are introduced to 4-H, however, they do not have to be current members to participate in the workshop. Maryland law 5-801, Confinement in Dwelling, Building, Enclosure, or Motor Vehicle, states that youth under the age of 13 are not permitted to care for younger children without adult supervision. The Babysitting Program teaches youth 13 and older to become responsible, reliable, and dependable babysitters. The program focuses on five areas: Developmental Stages of Children, Feeding Children, First Aid, Babysitting Basics, and Marketing Your Babysitting Services. Participants in the Babysitting course are required to take a 50-question test at the end of the workshop. The test is graded, and participants with a score of 80% or better receive a certificate that is proof of individual participation in the course. The Parent program has identical areas, except for Marketing Your Babysitting Services and the 50-item test.

**Stakeholder Satisfaction:**

The Babysitting and Parent Helper Program is a one-day workshop that prepares youth to become better caregivers. There were 11 Babysitting workshops held around the county and 6 Parent Helper workshops. The libraries had a strong connection with the program, providing meeting space and marketing the program. The site librarian conducted a presentation on the library and how it could be a beneficial resource.

There were 151 participants in the Babysitting program, and 110 participants in the Parent Helper program. This year’s program boasted a 99% successful completion rate. Participants reported that they enjoyed the program.

**Accomplishments and Impacts:**

Participants who take the Babysitting and Parent Helper workshops are better child caregivers. The participants are taught how to feed, change, entertain, and work with children in a crisis. Parents and returning participants comment that they have more babysitting business due to the program. Parents also report that they have confidence in leaving their children with someone who has taken a babysitting course.

**Resource Commitment:**

A summer 4-H assistant teaches the program. The Baltimore County Extension office provides funds for all materials for the program.

**Collaborators:**

The Baltimore County Library System was one of the major collaborators in this project. There was also support from the Baltimore County Fire Department and local precincts in the Baltimore County Police Department.

**Contact Person:**

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**Other Base Program Areas This Program Applies to:**

Leadership & Volunteer Development, Family Development

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*New Mexico*

## **4-H After-School Program**

**Situation and Program Description:**

A 1997 assessment of the County Maternal and Child Health Council activities identified the need to promote and support the development of after-school programs as a means of addressing substance abuse and gang-related involvement by youth. About 33% of children aged 5-18 in Rio Arriba Co. (RAC) live in poverty, and 56.4% live in families where both parents (and the one in single-parent families) were in the workforce. RAC leads the state in alcohol and drug related mortality, with the drugs of choice being marijuana, cocaine, heroin, and methamphetamine. A coalition of health and education professionals identified the fact that there are significant gaps in the area of youth development as a primary prevention approach. The need for youth to be engaged in leadership building activities, more out-of-school activities, and additional family-oriented activities was identified. The intent of this project is to provide an accessible and safe environment after school, for children to increase their capacity to develop into productive and responsible citizens, and to reduce the opportunity for risky behavior. The CES 4-H Youth Development Program provides all of these opportunities. Potential benefits for

after-school programs are reduced juvenile crime and victimization, better grades, improved behavior, better social skills, improved self-confidence, improved school attendance, and reduced dropout rates. This free program has a potential cost savings in child care for county residents of \$155,624.

**Stakeholder Satisfaction:**

The project has a commitment of 3 FTEs and about 20 other part-time employees, with 2 staff members per day at 5 elementary school sites, for a total of 160 students for 32 weeks. As stated, RAC is experiencing a severe drug abuse problem, and there is a limited number of positive activities for youth to become involved in during the after-school hours. Education goals include life skills development; tobacco and substance abuse prevention; diversity and cultural awareness; conflict resolution; nutrition and fitness; and homework assistance. Kids love the program. Parents are so pleased to have their children involved in a quality program. One parent was thrilled to find a program such as this, as her daughter had some behavior problems and simply needed some strategies to channel her daughter's energy into something positive.

**Accomplishments and Impacts:**

4-H After-School Program students had an overall 17.5% knowledge gain in understanding and recognizing the differences between legal and illegal drugs and various categories of abused substances, and they are aware of the negative effects of drugs, alcohol, tobacco, and inhalants. Teachers at the school sites have noticed students in their classes who are enrolled in the program are behaving better, turning in homework, and receiving better grades.

**Resource Commitment:**

\$750,000 from Department of Justice, Office of Juvenile Justice and Delinquency Prevention.

**Collaborators:**

State 4-H office, Chama Valley School District, Mesa Vista School District, Espanola School District, USDA school snack program, 21<sup>st</sup> Century Education Program, Jemez Mountains Electric Co., County DWI program, Character Counts Council, Espanola Chamber of Commerce.

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## Basic School-Age Care (BSAC)

### **Situation:**

There was a need in the state of North Carolina for all child care centers that serve school-age children to have consistent, basic, and quality school-age training.

### **Program Description:**

North Carolina Cooperative Extension Service, with funds from the Department of Health and Human Services, Division of Child Development, developed a 7-hour orientation training covering 7 basic modules of quality school-age care. By implementing a train-the-trainer model, BSAC training has spread all across the state of North Carolina very rapidly.

### **Stakeholder Satisfaction:**

The Cooperative Extension Service, in collaboration with many other agencies and volunteers, developed a 7-hour, 7-module basic training for providers who serve school-age children. This met the need for the state licensing requirements for centers that serve school-agers. By implementing the train-the-trainer model, we have been able to reach many providers throughout the state. Each of our 151 trainers who were trained between 1999 and 2001 have committed to holding at least 4 trainings per year all over the state. This model proves to be a very effective way to reach as many providers as possible.

### **Accomplishments and Impacts:**

Since June of 1999, the Cooperative Extension Service and a national trainer from Wellesley College have trained 151 BSAC trainers. Since then, more than 500 trainings have taken place all over the state and more than 7,900 providers have been reached. An estimated 117,500 children have been positively impacted through this training. A master schedule of all BSAC trainings is mailed out monthly to community colleges, Smart Start Partnerships, and family resource centers. It is sent electronically to state 4-H agents, FCS agents, and child care resource and referral agencies. An updated schedule is also posted on the North Carolina Division of Child Development's website and on the 4-H School-Age Care Project's website, at [www.nc4h.org/sacc](http://www.nc4h.org/sacc). There was one more BSAC Train-the-Trainer session scheduled for November 5-6, 2001, where 10 more trainers were to be trained.

### **Collaborators:**

Department of Health and Human Services, Division of Child Development, county 4-H agents, county FCS agents, community college system, Smart Start Partnerships, family resource centers, resource and referral agencies, parks and recreation department, churches, Y's, community school systems.

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**Other Base Program Areas This Program Applies to:**  
Leadership & Volunteer Development

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*Arkansas*

## **4-H QUEST**

**Situation:**

In Craighead County 22.4% or 4,586 of the children live in poverty. According to the Arkansas Employment Security, Craighead County has 40,900 residents employed and 1,575 that are unemployed. The median income in Craighead County is \$26,380, compared to \$26,515 for the state.

Many of the 19,925 children come from families of the working poor. Many of the 4,586 children who live in poverty are left alone to care for themselves because the family cannot afford care or it is not available in the areas in which they live. Due to income restraints, many cannot participate in traditional after-school enrichment type activities.

**Program Description:**

The 4-H Quest after-school enrichment program targeted youth age 8 - 12, whose family income is equal to or less than 185% of the poverty level. There were 4 after school sites established. Three of the sites were in rural Craighead County and one was in the Urban area. The program provided two to three hours of hands-on learning experiences per session. Each group met once each week. The program focused on the development of life skills among participants. These skills will not only enrich their lives, but also will instill basic concepts which will repeatedly be used throughout their lives. The life skills that were focused on were: self motivation, team work, self-esteem, conflict resolution and sharing. Each meeting included snacks, games that taught a lesson, subject for the day, and craft. All activities revolved around life skills. The experiential learning model was used as the teaching model. 4-H curriculum was utilized. Participants who did not miss more than 5 sessions were taken to the Arkansas 4-H Center to attend an Environmental Education Camp.

**Stakeholder Satisfaction:**

The commitment of Extension personnel to this project was .25 FTE's, however it took .75 FTE'S to complete the work. Arkansas State University which is located in Craighead County collaborated in the program. ASU provided graduate students to serve as teachers and a faculty member to complete the evaluation. There were a total of 102 children who participated in Quest. All program materials were targeted for a specific audience. For example we determined that one group was having a great deal of conflict. It was decided to change their program to the Talking with TJ curriculum. 4-H curriculum was utilized for lessons.

**Accomplishments and Impacts:**

Both parents and children were surveyed to determine if Quest was beneficial.

From the results of the parent's survey, it is quite clear that the parents were happy with the after-school program and believed that it benefitted their children. While only a little over one-third of the parents responded, the results were quite complimentary.

Some might suggest that of all the stakeholders involved with after-school program, it is the parents who are in the best position to judge if the program has been beneficial or not to their children.

Children were interviewed to find out how they were affected by Quest. It is clear that the children enjoyed the program. There were many aspects of the program that they like. When asked about what they had learned, many identified one or more of the program goals or "life skills." The vast majority even responded that they would participate in the program again next year if available. From these results, one would have to assume that the program had been successful and that, at the very least, some of the program goals were realized within the children.

**Resource Commitment:**

Funding for the 4-H Quest program came from T.E.A. funds. It was a one time grant in the amount of \$99,000.00.

**Collaborators:**

University of Arkansas Cooperative Extension Service, Arkansas State University, Bay School District, Buffalo Island Central School District, Caraway Housing Authority, Magnolia Road Baptist Church, USDA Snack Program

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**Other base program areas this program applies to:**

Family Development & Resource Management

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*North Carolina*

**Pilot School-Age Care Rated License Project**

**Situation:**

NC Division of Child Development wishes to improve the quality of school-age care for the children of North Carolina.

**Program Description:**

Using the NC Division of Child Development's rated licensing system, the 4-H Youth Development, School-Age Care Project provided grants to encourage unlicensed school-age care

programs in the State to seek licensure and for those programs minimally licensed to seek a higher rated license; both situations improving the quality of care for school-age children in North Carolina.

**Stakeholder Satisfaction:**

The quality of unlicensed and licensed school-age care programs in North Carolina was mediocre. Some of the barriers to improving the quality of school-age care were financial, lack of training and technical assistance, education, and program resources. These barriers had to be addressed. January, 2001, grants in the amount of \$5,000 each were awarded to 22 school-age care programs in 7 counties. The improvements in quality moved these programs from unlicensed to licensure or from a 1 or 2 Star rated license to a 3, 4, or 5 Star rated license. Five (5) Star rated license is the highest rated license. These programs provide staff that have training and experience, education and materials to challenge, stimulate, and develop the child's mind and to support the child's emotional, social, and physical needs.

**Impact and Accomplishments:**

Of the 22 programs that began the process from across the State; 5 programs achieved the 5 Star rated license, 2 achieved the 4 Star rated license, and 3 achieved the 3 Star rated license. 3 programs have temporary licensure and 6 have programs successfully completed the licensure process and are awaiting the awarding of their license. 1 program withdrew and 2 programs' licensure applications have been held to provide time for the programs to meet the six month compliance component of the licensure process. The number of young lives these programs have impacted on is 1400. That is 1400 young minds and bodies these programs have made stronger, wiser and smarter. The areas of child development, staff/parent relationships, in/outdoor activities, and health & safety are where the quality improvements were made.

**Resource Commitment:**

These grants were provided by 4-H Youth Development, School-Age Care Project, NC Cooperative Extension Service, NC State University through the federal Child Care Development Fund administered in North Carolina through the NC Department of Health and Human Services, Division of Child. Total amount funds for this grant was \$121,000.

**Collaborators:**

County 4-H Agents/Offices, Public schools, Y's, churches, private centers and various retail businesses in the counties and parents.

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*North Carolina*

## **4-H Support Our Students**

### **Program Description:**

4-H Support our Students (4-H/SOS) is charged with strengthening the quality of care provided to middle school youth in after-school programs across the state of North Carolina. This mission is achieved through grass roots, direct consultation with programs as well as the delivery of need-specific training to adults that coordinate the programs. Individual sites are found in both rural and urban areas. Youth in the after-school programs present a variety of issues that include poor social skills, unstable family environments and low academic performance. It is the 4-H/SOS belief that there is a direct correlation between the efforts this program provides and the quality of care youth receive; high-level skilled adults work best with high-risk youth.

### **Stakeholder Satisfaction:**

There is one 4-H staff fully committed to the execution of this program. Since 1994 a variety of paid assistants have been involved; however, due to a strong partnership with the primary funder, effective aid could be provided with less staff. For seven years, this program has been supported by a partnership with SOS staff directed by the Special Initiatives branch of the North Carolina Department of Juvenile Justice and Delinquency Prevention. This renewed partnership outwardly demonstrates the satisfaction of a primary stakeholder.

### **Accomplishments and Impacts:**

With the primary goal of delivering need-specific training to programs across the entire state, surveys were drafted and distributed to ascertain needs. 53% surveyed returned completed documents. Materials were then gathered in the identified areas and delivered in 4 separate sessions to a total of 120 staff. 100% of training attendants felt the materials were relevant and helpful to their programs. In addition to need-specific training, two conference-style-training sessions were conducted. One focused on experiential learning models and activities. Of the thirty-three staff that attended, each noted their learning had increased by 2-3%. The second conference was offered to thirty-two providers. Once again all reported the materials covered were relevant, and useful. All in all approximately 200 providers were trained in the 2000 grant year. Each of these was positive about the skills learned and the transfer of material back to their programs.

### **Resource Commitment:**

The North Carolina Department of Juvenile Justice funds this program with a current grant allotment of \$90,000.

### **Collaborators:**

NCSU 4-H School Age Care Project staff, Cooperative Extension Agents, The North Carolina Department of Juvenile Justice, Community Colleges, 4-H Camp Staff, have all collaborated with 4H SOS to carry out the mission of this program.

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**Other base program areas this program applies to**  
Community Resource & Economic Development

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*North Carolina*

## **School-Age Care Community College Institute**

### **Situation:**

The need for school-age care coursework as a part of Community College early childhood education departments is evident throughout North Carolina, given the need for staff in school-age care programs.

### **Program Description:**

Early childhood community college instructors from all North Carolina community colleges were invited to attend a School-Age Institute held in June 2000. The Institute was initiated to increase community colleges' commitment to offering school-age care as a career choice for students, in addition to making more school-age courses available. A follow-up strategy conference was held in April 2001 for instructors to share their accomplishments in addition to sharing materials and resources that they are using in their programs.

### **Stakeholder Satisfaction:**

One .5 FTE was committed to this project. The target audience included community college early childhood instructors. Thirty-one community college faculty attended the Institute representing 21 of 58 community colleges in North Carolina. Twenty-one instructors from sixteen community colleges attended the follow-up strategy conference. The Division of Child Development's licensing requirements for school-age care programs includes education requirements for staff, which can be met through community college courses. More information on school-age care encourages more school-age care course offerings. Enthusiasm and interest were high among participants.

### **Accomplishments and Impacts:**

The colleges committed to providing more school-age courses, developing a brochure for choosing school-age care as area career option, creating a webpage with school-age resources, development of school-age care curricula, and development of a scholarship fund that would enable students to attend statewide school-age care training. The instructors were given resources to add to their college library. Follow-up with the community colleges shows that they are adding more school-age courses and resources to their programs.

### **Resource Commitment:**

Grant funds for this project were awarded to 4-H Youth Development, NCSU through the

federal Child Care Development Fund administered in North Carolina through the Department of Health and Human Services, Division of Child Development.

**Collaborators:**

North Carolina Department of Health and Human Services, Division of Child Development  
North Carolina Community College System, North Carolina State University, 4-H Youth Development

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*North Carolina*

## **Outreach Project**

**Situation:**

During the most significant immigration period in the State of North Carolina, the most recent state report (MDC.2000) showed that NC is experiencing the most rapid growth of Hispanic/Latino population estimated at 400% between 1990 and 2000. There is a need, in the state of North Carolina, for all child care centers that serve school-age children to have a consistent, basic, and quality school-age curricula training. North Carolina after school programs are in the beginning stages of providing curricula and other materials in Spanish that are desperately needed in this state.

**Program Description:**

The existing 4-H curricula "Adventures in Learning" and "Discovering" have been translated into Spanish for use in school-age care programs. This curricula have topics which include Environmental and Earth Education, Health Lifestyles, Citizenship and Civic Education, Personal Education and Leadership, Family and Consumer Science, Science and Technology, Plant, Communication and Expressive Arts. Each topic has a Member's Manual and Helper's Guide. These Curricula will be used by urban and rural audiences.

**Stakeholder Satisfaction:**

One full time person was funded to run this translation project and to develop and deliver training on it. The target audience for this project is school-age care programs who serve or employ Spanish-speaking individuals. The audiences educated thus far have been very satisfied with the curricula and have expressed great expectations for its usefulness in school-age care programs.

**Accomplishment and Impacts:**

The accomplishment of this program has been the translation of high quality life skills curricula into Spanish and the subsequent training and distribution of this material. Although the training and distribution is just beginning, the director of this project has shared this material with the following agencies: Hispanic/Latino Chamber of Commerce of NC, North Carolina Society of

Hispanic Professionals, El Pueblo Inc, Governor 's Advisory Council on Hispanic/ Latino Affair, 4-H School Age Care agents and providers of several counties, Migrant Education Program Specialists, and North Carolina Central University Chautauqua Conference 2001 participants. The impact of this program is the number of school-age care professionals that have learned about this material and the number of children impacted by the resources. More than 200 professionals have learned about this material and more than 450 children have been impacted.

**Resource Commitment:**

This Project was funded by the federal Child Care Development Funds through Department of Health and Human Services, Division of Child Development.

**Collaborators:**

Department of Health and Human Services, Division of Child Development, County 4-H Agents, County FCS Agents, Community College System, Smart Start Partnerships, Family Resource Centers, Resource and Referral Agencies, Parks and Recreation Department, Churches, Y's, and the Governors' Support Our Students Program.

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*North Carolina*

## **Family Child Care Provider Training**

**Situation:**

Training for Family Child Care providers (in homes) who care for school-age children is needed for such topics as appropriate activities for school-age youth, managing finances, and discipline.

**Program Description:**

Training and technical assistance is offered to family child care providers who care for school-age children. Scholarships are offered to family child care providers to support their attendance at the regional Family Child Care state conferences and the North Carolina School-Age Care Coalition conference. The scholarship includes conference registration and travel to the conference. Four regional Family Child Care conferences are held in North Carolina annually, in addition to one statewide school-age care conference.

**Stakeholder Satisfaction:**

One .5 FTE is committed part-time to this project. The target audience is family child care providers. Since 1997, 212 scholarships have been awarded for Family Child Care providers to attend the regional conferences and 82 scholarships have been awarded for Family Child Care providers to attend the statewide conference. Credit hours for training can be applied towards in-

service training, required by the Department of Health and Human Services, Division of Child Development for licensing.

**Accomplishments and Impacts:**

Evaluations from providers indicate that they are very satisfied with this training and want more opportunities to attend training. In addition, parental satisfaction surveys indicate that parents have noticed positive changes as a result of the trainings. Some providers have said that without the scholarships, they would be unable to attend the trainings. Efforts are made to ensure that there are always school-age care workshops available at the state conferences. Efforts are also made to ensure that there is always a school-age representative on conference planning committees.

**Resource Commitment:**

Grant funds for this project were awarded to 4-H Youth Development, NCSU through the federal Child Care Development Fund administered in North Carolina through the Department of Health and Human Services, Division of Child Development.

**Collaborators:**

North Carolina Department of Health and Human Services, Division of Child Development  
North Carolina State University, 4-H Youth Development  
North Carolina Child Care Resource and Referral Agencies  
North Carolina Family Child Care Providers

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*New Mexico*

## **4-H Share/Care Program**

**Situation:**

Children deserve a caring adult role model that can teach and guide them. Yet, too many New Mexico children lack adequate adult supervision and guidance. Factors continue to complicate the lives of many New Mexico children. In 1999, 31% of NM youth were living in poverty, 43% were born to unwed mothers and belong to families with more children and fewer adults in the home. These statistics lead to a tremendous vulnerability among New Mexico's youth, particularly during unsupervised out of school time. Studies demonstrate that unsupervised free time among youth is a strong variable for increased delinquency and substance abuse.

**Program Description:**

Four-H Share/Care (Sharing Our Expertise As We Care for Our Youth) After School Program sites are in some of the most economically and socially deprived neighborhoods in the state. Almost one fourth of New Mexico counties were involved in 4-H after school programming in 2000-2001. Each site offers customized programming based on community needs,

infrastructure, partnership capacity building and advisory committee recommendations. Substance abuse prevention education is a central focus of program efforts. Along with this, 4-H curricula that is designed to stimulate interest in exploring hands-on projects, developing life skills, increasing self-esteem, enhancing leadership capacity and shaping positive citizenship is included.

**Stakeholder Satisfaction:**

Each county has at least one Cooperative Extension faculty member supervising the program including the staff hired for 4-H after school programming. New Mexico State University Cooperative Extension has provided the grant writer, contract administrator, and a 4-H Specialist who serves as project director.

**Accomplishments and Impacts:**

Over 2,000 youth, ages 5-15, participated in after school, school enrichment and summer programming this past year. One of the counties was specifically asked to provide an in-school component to 4-H Share/Care. This was provided, in addition to after school and summer programs. Youth have received a variety of experiential learning opportunities through 4-H Share/Care. In the area of substance abuse prevention education, one county's program with 5th graders reported that 96% of the completed pre and posttests indicated that "They have a goal to not use drugs." Student responses to the open-ended posttest question, "What is the most important thing you learned from this program" included the following responses:

- Not to take tobacco or drugs, and succeed.
- How to make decisions.
- I learned that you don't have to smoke to be cool.
- You can say no to your friends.

At another county site, there was a 50% increase in knowledge gain on the statement "I know what smoking can do to me." There was a 36% increase in knowledge gain on the statement "I can leave a bad situation." Another county site showed that children's knowledge gain had increased as much as 70% on tobacco and health issues. Youth participating in 4-H Share/Care had a safe, fun, educational and stimulating place to go during out of school time.

**Resource Commitment:**

\$250,000 received from the Office of Juvenile Justice and Delinquency Prevention and \$100,000 received from New Mexico State University Cooperative Extension Service for the period of 1999-2001. To date, twelve counties have participated in the program.

**Collaborators:**

Office of Juvenile Justice and Delinquency Prevention, New Mexico State University Cooperative Extension Service, three Pueblos, Apache and Navajo Reservations, Indian Center in Albuquerque, various community centers, Youth Court, Recreation and Education Council, Extension County Advisory Committees, libraries, schools and 4-H teen and adult leaders.

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## **Workforce Preparation**

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*Mississippi*

### **“The Working Class”**

#### **Situation:**

About one half of the graduating high school students in the United States will leave school without the knowledge or foundation skills required to find and hold a good job. Youth need exposure to a variety of career opportunities. Youth also need to be aware of the skills and competencies necessary to succeed in the world of work, as determined by the Secretary of Labor’s Commission on Achieving Necessary Skills (SCANS report). Then-Secretary of Labor Lynn Martin believed that in today’s economy we must do more than teach students reading, writing, and arithmetic. Diplomas must reflect the demands of a changing workplace for broader skills beyond the 3 R’s (Martin, 1991). Career development/workforce preparation is a key life skill competence in education and youth development today.

#### **Program Description:**

The Alcorn State University Cooperative Extension Program Career Development/Workforce Preparation Program entitled “THE WORKING CLASS” is a 4-week program conducted in vocational centers and school districts in southwest Mississippi. The program is designed to help prepare youth in their schools for future employment. Students participating in this program learn essential workplace skills, such as how to write a cover letter, how to develop resumés, how to properly prepare a job application, and how to dress for and manage an interview. They also learn life skills such as decision making, time management, and money management.

#### **Stakeholder Satisfaction:**

The Working Class staff met twice a week all day for 4 weeks in the voc-tech centers and classrooms. The targeted audiences were rural African-American youth from limited-resource families and communities. These youth were targeted because of their communities’ limited educational and economic opportunities. Students, teachers, and school administrators continue to request this program each year. Many have reported a decline in behavioral problems in the students who participated in the program. They have noted improvement in students’ self-esteem and grades. This program has had a very positive impact on the students, teachers, and school officials. It has given the students an understanding of personal responsibility for behavior and choices, and it has helped to instill positive work skills.

#### **Accomplishments and Impacts:**

In the past year 3,169 youth participated in the Working Class Program. Some 75 Career Development/Workforce Preparation workshops were conducted in five southwest Mississippi counties. These workshops were a part of either a tech prep or business and communication

class at a vocational center or high school. To complete the program, each student had to complete two interview sessions – one before training and one after training. Both interviews were videotaped. This process gave the students an opportunity to critique their interviews and see their strengths and weaknesses to determine what they needed to do to improve their skills. Portfolios were established for each student, which included (1) a cover letter, (2) a resumé, (3) two completed job applications, and (4) an interview evaluation sheet.

This program involved the state and county extension staff, local school districts, teaching faculty, and local businesses. Eighty-nine percent of the youth who participated in the program can accurately complete a cover letter, a resumé, and two types of job applications and can successfully complete the interview process.

**Resource Commitment:**

The key to the success of this program has been the partnership established between local business, Cooperative Extension, and the local school districts. This is an on-going program through 4-H and Youth Development at Alcorn State University.

**Collaborators:**

County extension agents, university teaching faculty, local businesses, and local school districts.

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*Maryland*

## **4-H Entrepreneurship Residential Camp Program**

**Situation:**

The Baltimore City 4-H Entrepreneurship Residential Camp Program offers an opportunity for youth to learn important skills and attitudes about the social and economic aspects of the workforce while having fun earning money.

**Program Description:**

The Baltimore City 4-H Entrepreneurship Residential Camp Program's purpose is to give youth ages 8-13 an opportunity to have fun while learning the basics of entrepreneurship. The youth participants are representative of the disenfranchised adult populations in Baltimore City: predominantly African-American, poverty/low income, nominal academic achievement, and

underskilled for the current job market. As is true for any identified Empowerment Zone<sup>1</sup> our youth need hands-on, meaningful learning experiences that lead to economic and personal stability. Developing entrepreneurship skills is one method of addressing that need. Participants learn how to start a business, develop advertising, and set marketing strategies.

Entrepreneurship concepts were taught from researched-based curriculum (*Learn and Earn for Fun and Profit, and Mini-Society*). The goals of the program were to: (1) provide campers with opportunities to experience entrepreneurship; (2) teach entrepreneurship concepts in the context of these experiences; and (3) integrate the study of entrepreneurship with other subjects such as language arts, math, social studies, team building, and problem solving. In addition, campers were offered classes and activities in cultural diversity, team building, sports, hiking, stream testing, recycling, plant and tree identification, swimming, arts and crafts, campfires, movies, a talent show, and a “Super Star Citizenship” Award program.

### **Stakeholder Satisfaction:**

A Baltimore City Extension educator secured funding for the camp program, co-facilitated the training of youth and adult volunteers, coordinated and supervised the program, and developed the evaluation forms and process. Seventy-eight campers from Baltimore City and surrounding counties attended the Baltimore City 4-H Entrepreneurship Residential Camp Program in Harford County, MD, July 24-28, 2000. All campers attended two, 2-hour entrepreneurship classes per day. The lessons were developed to match the differing skills of the children. This strategy and the research-based curricula reinforced the acquisition of core academic, social, and life skills. At the end of the camp week, 100% of the campers demonstrated what they learned by selling products they made at the Entrepreneurship Expo open market. Aspiring young entrepreneurs sold personalized keychains, snacks, hotdogs, hamburgers, sodas, jewelry, artwork, face painting, and raffles. Campers received a portion of the profits. One camper summed up the experiences: “I learned how to make money, work with others, and have a lot of fun too!”

### **Accomplishments and Impacts:**

The program was evaluated through a formal evaluation process, demonstration, and observation. As a result of teaching entrepreneurial concepts:

- ! Ninety-four percent of campers reported that they learned entrepreneurship concepts.
- ! One hundred percent of campers demonstrated acquired skills in entrepreneurship during the Mini-Society program and Entrepreneurship Expo.
- ! Three youth were trained in, and then co-facilitated, the Mini-Society curriculum during the camp program.
- ! Twenty volunteer staff assisted in the design and implementation of the Mini-Society program and the Expo.
- ! Ninety-six percent of campers gave the Entrepreneurship classes a rating of excellent.
- ! Ninety-eight percent of campers gave the Entrepreneurship Expo a rating of excellent.
- ! Ninety-two percent reported that they learned how to get along with others.

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<sup>1</sup>Empowerment Zones are communities targeted to receive funds through the Department of Housing and Urban Development to end issues of blight, unemployment, and pervasive poverty.

The program received the Eleanor P. Eells Award for program excellence by the American Camping Association. The program was one of six camps chosen nationwide for outstanding and unique programming. The program was featured in the University of Maryland-College of Agriculture and Natural Resources Annual Report 2001 Calendar.

**Resource Commitment:**

The program received \$400 from the Maryland State Arts Council. Baltimore Full Partners-Teen Corps Program provided in-kind contributions through AmeriCorps volunteers as camp counselors, and \$1,000 was received from a Kellogg Foundation grant.

**Collaborators:**

The success of the Baltimore City 4-H Entrepreneurship Residential Camp Program rests largely on the commitment and skills of our volunteers and extension staff. Volunteers were provided through a partnership with Fellowship of Lights Youth and Community Service AmeriCorps Program, and Baltimore Full Partners-Teen Corps. The volunteers and staff met October-June to receive and co-lead in training such as camp planning and implementation, leadership development, conflict resolution, entrepreneurship, community service, team building, and health and safety standards. Extension staff from Baltimore City and Anne Arundel County and a state extension specialist assisted in teaching entrepreneurial concepts.

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**Other Base Program Areas This Program Applies to:**

Community Resources & Economic Development

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*California*

## **Teens As Teachers**

**Program Description:**

In the city of San Jose, CA, three San Jose Unified School District schools, Pioneer High School and Los Alamitos and Almaden Elementary Schools, cooperated with Cooperative Extension in a teen cross-age science instruction program titled Teens As Teachers (TAT). Fourteen Mexican American males, and two white teens (one male , one female) from Pioneer H.S. received training on team building, processes of science, teaching methods, and rocket science units emphasizing experiential learning. Teams consisted of three youth. Together they planned and delivered unit science lessons to two 5<sup>th</sup> grade classrooms, reaching 66 children who were 45% Mexican American, 35% Asian American, and 20% white. The program's purposes were:

- ! To expand teen educational purpose through “real world” learning experiences,
- ! To increase teen planning, cooperation, and implementation skills, and
- ! To stimulate teen’s and elementary children’s science critical thinking skills.

### **Stakeholder Satisfaction:**

The Youth Development Advisor dedicated 20% of her time to the project. She supervised the program coordinator, trained teens, developed and cultivated relationships with youth, school administrators, teachers, and business partners. The program coordinator dedicated 40% of her time to the project. She developed and revised the curriculum and handouts, developed science kits for instruction, and supervised teens while they served as teachers of elementary school-aged children.

Staff and teens met every Monday afternoon from September until June. Youth who served as TAT self-selected themselves to participate in this project. Five teenagers were involved in sports. Every Monday they would miss 20 minutes of sports practice, because they had willingly enrolled in this program. Teens received 32 hours of science curriculum training and spent 8 hours teaching in each elementary school classroom. Teens were trained one Monday and then they taught that activity the following Monday. This set-up allowed teens to fully experience the activity themselves, get comfortable with what they needed to do, and to practice teaching each other prior to teaching younger children.

Teens, young children, teachers and school administrators were very satisfied with the program as evidenced by ongoing conversations and focus group interviews.

### **Accomplishments and Impacts:**

The program provided authentic work experiences offering teens new insights into teaching, peer cooperation, learning, and science. A pre/post questionnaire and focus group interview probed teen attitudes and thoughts. Though tentative, the survey pointed to some attitudinal changes, and the focus groups helped identify program operational issues.

### **Pre-Post Teen Survey:**

Sixteen teens participated in all phases of the project and provided complementary pre- and post- surveys. The survey was given in October and again in June. Although respondent numbers were at best tentative, the data provides some indication on teen thinking.

When asked about “how they felt about working with a group of classmates on a team project,” the teens generally responded very positively (90%) to the idea on both pre- and post-test surveys. All teens had participated in group projects an average of five times prior to joining this project. Teen teaching teams were rearranged each time, due to absenteeism. Hence, teens did not fully experience working collaboratively in teams.

When asked “How do you think about yourself as a student or learner?” teens indicated little significant change in personal motivation and their class participation. The only significant positive change in this category was in whether teens “have to be encouraged to do homework” which decreased from 80% to 50%. In terms of how teens “feel about science,” there was a

70% increase. Throughout the project, teens expressed that they had never learned science in a “fun way” and that it was great to learn Newton’s Laws and then apply them. However, interest in science course work at school remained about the same before and after the experience.

When queried on their work with children, 20% of teens expressed strengthened ability in “tutoring a child,” “coaching or teaching a small group of children,” and in “speaking before a group of peers.” Finally, when asked about service learning as a part of high school education, teens were unclear about the project’s impact. “Service learning importance” decreased slightly from 80% to 70%. Responses advocating that service learning be required “for all high school students” increased from 50% to 70%. In summary, participant numbers and length of experience should indicate cautious use and interpretation of data.

**Resource Commitment:**

A \$50,000 grant from the William and Flora Hewlett Foundation supported this program.

**Collaborators:**

Pioneer High School, Los Alamitos Elementary School, Almaden Elementary School.

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*Georgia*

## **Survive and Thrive in the World of Work**

**Situation:**

Rural counties in Georgia consistently have higher unemployment rates than the state average, and the poverty level and high school drop-out rate are high. Youth living in these rural counties need skills for future employment and knowledge of college and career preparation opportunities. They also need encouragement and assistance to pursue higher education.

**Program Description:**

Fifty-five 4-H teenage youth from the three rural counties of Crisp, Dooly, and Wilcox participated in the World of Work program and day camp. Seminars were taught by area college staff on “Succeeding in Life” and “Succeeding in College”, and “College Can Be a Reality For You.” Students participated in a trip to the University of Georgia and to South Georgia Technical School to learn about college and career opportunities. The World of Work day camp connected youth with area businesses so that 4-H’ers could learn about job requirements, business ownership, corporate management, and technology in the workplace. Youth shadowed employees, conducted interviews, completed work tasks, and researched careers.

**Stakeholder Satisfaction:**

One 4-H agent and three 4-H program assistants were involved with the World of Work program. The targeted audience participated in activities over a 1-year period. School systems and local business communities totally supported the program, and local media considered the program newsworthy. Four-H'ers in the program were featured on television and on the front page of the local newspaper.

**Accomplishments and Impacts:**

Slightly more than 90% of the youth involved in the Survive and Thrive in the World of Work program indicated that the program had motivated them to make better grades in high school and to plan for education beyond high school. Seven older participants applied for, and received, college scholarships, and nine youth made college and career decisions based on the World of Work activities. Twenty-one youth completed in-depth research projects on a career area of interest.

**Resource Commitment and Collaborators:**

The program was conducted with limited resources but strong collaborative support from Abraham Baldwin College, South Georgia Technical School, Crisp Regional Hospital, Planters First Bank, Callisto Computers, Holiday Inn, Georgia Pacific, Coes Funeral Home, Marise Restaurant, and other businesses. Media coverage was provided by WSST Channel 55 and the *Vienna News Observer*.

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**Other Base Program Areas This Program Applies to:**

Community Resources & Economic Development, Family Development & Resource Management

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*Georgia*

## **Leadership Workshop**

**Situation**

Bacon County is a rural community of about 10,000 people, mostly a farming community with very little industry. The opportunities for leadership development among youth are limited to clubs during the school year, recreation leagues during the summer months, and activities in a few of the local churches. The Bacon County 4-H Club is very active year round in seeking to provide places and opportunities for the youth to learn and practice leadership qualities that will stay with them throughout their adult lives. This summer we developed a one-day Leadership Workshop that was open to all the 4-H members in grades 5-12 in Bacon County. Through this workshop, we had 4 main goals:

- (1) to introduce our youth to members of the community that held leadership positions,
- (2) to allow the children time to listen to these leaders give insight into leadership qualities and to pass on wisdom they had gained,

- (3) to complete leadership activities that would expand and enhance their leadership abilities,
- (4) to allow the 4-H'ers to actively tour some of the major businesses in our community.

Due to many of our youth staying in Alma after graduating, we believed this workshop would give our participants a basis upon which to begin building strong leadership qualities for our future community leaders. Leaders are necessary in every aspect of life, and we wanted to be a part of building our community leaders of tomorrow.

The workshop began with a tour of the D.L. Lee and Sons Meat Packing Plant. This plant employs over 200 individuals in the community. It is one of our largest employers. The children took a tour of the plant and interviewed Karen McCarty to find out what the company looks for in hiring employees.

Following this tour, the children were taken on a walking tour of the new courthouse complex that houses all county and city government offices. While touring the courthouse, the Chairman of the County Commissioners, Eugene Dyal, spoke to the 4-H'ers about his job and what he had learned about leadership over the years. He told them how important learning to speak in public was to further their goals in life. He gave marvelous examples of how he had learned what leadership qualities were necessary in his particular job. He stressed the importance of education and the many ways in which being active in 4-H could benefit their lifelong goals.

After leaving his office, we proceeded to the city offices where the children met with Magistrates Court official, Sherry Tillman, and learned about the many different jobs handled within that office. The participants talked with local attorney Fred Kopp who shared his ideas about leadership and education.

Then on the final part of the tour, City Manager Tom Deen spoke with the 4-H'ers about his job and the need to have certain qualities to accomplish the things necessary to keep a local government in operation from day to day.

For lunch, the 4-H'ers were treated to pizza, drinks, and a 4-H cake compliments of the Alma Satilla REMC office. This office employs 85 people and is a regional office for the REMC covering nine counties. After a delightful lunch, the CEO of Satilla REMC, Robert Rentfrow, spoke to the children about leadership and how his participation in 4-H had made such a tremendous impact on his career. Mr. Rentfrow is a Master 4-H'er and believes in the power of 4-H in the lives of youth.

At the conclusion of the tours, the 4-H'ers returned to the 4-H office and participated in several activities to bring all that they had seen and heard together. They were given hands on learning activities with scenarios and teamwork exercises to build on the ideas that they had learned while out in the community.

Stakeholder Satisfaction

The adults that took part in the Leadership Workshop felt that the class was a great way for the youth to “see” and to “meet” community leaders. The 4-H youth that were involved in the workshop believed that they had learned much by being a part of this workshop. Following are some of the comments made by the 4-H’ers on the evaluation forms completed at the end of the session:

1. I have learned to try to lead my friends into doing the right things.
2. I will use the leadership skills I learned today to help me while working with teams or groups.
3. I learned that you must look at the responsibilities of being a leader before becoming one.
4. I have learned to listen, learn, and to speak up.
5. I learned to listen more.

#### Accomplishments and Impacts

Although the impact of such a workshop is difficult to measure, we believe that it can only serve to improve the leadership qualities of the young people involved. We also know it is necessary to continue to work on this area to reinforce the learning that took place. We have already planned to have another workshop very similar to this next summer. It will be interesting to follow the 4-H’ers who participated in the workshop to see what long term effects it will have on their young lives.

#### Resource Commitment

The only external cost was the donation of lunch by the REMC.

#### Collaborators

It was necessary to have the cooperation of D.L. Lee and Sons plant, the Courthouse offices, and the Satilla REMC. Without their help, cooperation, and willingness to give of their time to speak to the 4-H’ers, none of this would have been possible.

#### Contact Person

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#### *Maryland*

### **4-H Mini Society**

#### **Situation**

The Maryland Mini Society program provides an outreach to under- served youth in the major urban communities by promoting a team approach to include program visits and exchanges. One hundred twenty-five students were targeted for fall programs.

### **Program Description**

The Maryland program focuses on urban youth ages eight to twelve year olds. The program targeted the following delivery areas: state designated hot spots, school-enrichment, summer programs, after school community youth that had not necessarily been offered programs before. The focus has been to target a new audience where important life skills would be taught and to provide interest and opportunities to expand their outlook in life with no economic loss. Youth would learn about becoming an entrepreneur, how to conduct market surveys, promotional strategies, record keeping, career development and more.

### **Stakeholder Satisfaction**

Anne Arundel County, Howard County, Montgomery County and Baltimore City Extension offices committed 5 Educators (.10 FTE per faculty member) to conduct the program. Mini Society's met twice a week for a minimum of 10 weeks.

### **Accomplishments and Impacts**

Each county and city collaborated with urban partners that brought diversity to the 4-H youth programs through a different approach. Each educator presented at least three mini societies within their location and has agreed to continue offering the Mini Society program.

Two Mini Society banners, brochures and T-Shirt have been designed and produced.

A state Mini Society display has been developed to use as a resource to educate other Educators in Maryland and in other states.

Several accomplishments to date, include:

- A poster session was presented at the 2001 North Central Urban Extension Conference,
- A Mini Society poster session will be presented at the NAE4-HA 2001 National Conference in Bismarck, North Dakota,
- An evaluation tool has been designed and used to acquire measurable results,
- A total of nine Mini Society's have been presented and 150 + youth have been reached,
- A Mini Expo was held at the University of Maryland campus.

Through evaluations and feedback from a Family and Community Outreach Specialist the following was recorded: " in the school systems the programs brought to life math, social studies, economics, government and most importantly teamwork and fair play- all wrapped up in shrieking fun! The program gave measurable meaning to their classroom instruction-but it also gave them some of the best memories of their young lives."

### **Resources Commitment**

A proposal was developed and presented to Kauffman Center for Entrepreneurial Leadership. The proposal in the amount of \$20,125 was granted to conduct the program in Maryland. Resources also came from in-kind donations.

## **Collaborators**

Anne Arundel County: Hot Spot location at Van Bokkelen Elementary Pine Drive After School program.

Baltimore City: Edgecomb Circle Elementary School and 4-H Residential Camp.

Howard County: Howard School System and Community Housing Development.

Montgomery County: Edgewood Management Corporation, Rock Creek Terrace Community Center, and The Cardinal Group, Inc.

## **Contact Persons**

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Edith Williams, Extension Specialist, 4-H Youth Development, Maryland 4-H Center,  
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## **Other base program areas this program applies to**

Community Resources & Economic Development, Leadership & Volunteer Development

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*Mississippi*

## **E-Corps**

### **Situation**

There is a need to:

- Encourage youth to learn skills necessary for successful employment;
- Teach youth technology skills;
- Teach youth entrepreneurship skills; and
- Create an opportunity for hands on experience in these areas.

### **Program Description**

Youth from North Mississippi formed a group that they named E-Corps. The E stands for Entrepreneurship, Electronic, and Education. The word “corps” recognizes their desire to be dedicated hard workers similar to the Marine Corps or the Corps of Engineers. Twenty-six youth participated in a series of workshops and trainings on entrepreneurship and technology. They established a group business. They publish an educational newsletter for Career Discovery Classes. Each newsletter highlights a particular career via an interview with someone working in that career. The newsletter also offers an educational web site review, upcoming events available for youth and other related information. This diverse group of youth ages 12-18, are acquiring skills that will be beneficial to their future career.

### **Stakeholder Satisfaction**

Satisfaction for this program has been high. Not only have the participating youth acquired entrepreneurship and technology skills but also the community has benefitted from their newfound knowledge.

### **Accomplishments and Impacts**

The publication that is written and distributed by the E-Corps group has been highly praised by teachers who use it in their classrooms. Not only have they established a group business and learned the basics of writing business plans, marketing plans, record keeping, and product development, but six of the group own successful individual businesses as well. The E-Corps group taught a workshop for adults at the State CYFAR (Children, Youth, Families at Risk) Conference in Jackson. They also taught a workshop at the Lignite Mine for teachers and students participating in a pilot program. Two of the older participants received job offers based on the technology skills acquired through this program. They have designed web sites for several public events and businesses. They have acquired skills in technology, entrepreneurship, communication, and financial management.

### **Resource Commitment**

A grant from the Appalachian Regional Commission provided funding of \$10,000 for a computer laboratory.

### **Collaborators**

MSU Extension Service, 4-H Agents, North Mississippi Public Schools, ARC (Appalachian Regional Commission), Mississippi Department of Economic and Community Development, Mississippi Media

### **Contact Person**

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### **Other base program areas this program applies to:**

Community Resource & Economic Development, Leadership & Volunteer Development

## **4-H Americareads/Americacounts, Tutoring Program**

### **Situation**

Workforce Preparation-School to Work is one of the National Initiatives for 4-H Youth Development. The AmericaReads/AmericaCounts Challenge is a national bi-partisan effort to help every child read independently by the third grade. Children who cannot read early, but eventually will read, are hampered at the very start of their education and often for the rest of their lives. The AmericaReads/AmericaCounts/4-H Program addressed the Workforce Preparation initiative in a least two ways: 1) The college students are getting work experience and in some cases may actually make career goal changes because of their tutoring experiences, and 2) Children must be able to read and to do math to be prepared for the world of work. The children who are being tutored are enrolled in an urban school in New Brunswick. These children are at risk for many factors.

### **Program Description**

Work-study students are recruited, trained and placed as tutors of reading and math. Teachers indicate students who need tutoring, what their specific tutoring needs and availability are, whether they can work in groups or need individual assistance. Training consists of 3 hours in a group session where tutors receive instruction on how to plan lessons and techniques for tutoring the students. An additional 2 to 3 hours is required of the tutors to learn via tapes of actual tutoring sessions and instructions on how to use *The Phonics Game* to teach phonics. After training is completed, tutors are assigned students. The goal is to meet with the same students at least 2 hours two times a week. In 2000, county budget money was utilized to purchase Spanish language books along with the same book in English. Several books that teach math concepts on the lower grade levels were also purchased. These were added to two large plastic boxes of materials and games purchased previous years for use by the tutors and the children they tutor.

### **Stakeholder Satisfaction**

This program has been conducted for 3 years in the same elementary school. Each year the school principal has requested this program to continue in her school. The classroom teachers are cooperative and enthusiastic. Because this program is labor intensive for the tutors, we have a large turn over after only one semester. This year, for the first time, we have had a significant number of tutors (10) who have returned for a second semester.

### **Accomplishments and Impacts**

The Spring semester of 2000, 5 college students tutored 30 students in reading and math. Twenty (20) college students tutored 47 students in reading and 51 students in math for a total of 98 students for the Fall semester of 2000. During the Spring Semester of 2001, 11 college students tutored 39 youth in math and 37 youth in reading. It is difficult to get evaluations returned. Five tutors returned evaluations after the Fall semester. They all reported improvement in the children's reading ability and love for reading.

**Resource Commitment**

Rutgers, The State University through the Federal Work Study Program, Rutgers Cooperative Extension of Middlesex County

**Collaborators**

Rutgers, The State University through the Federal Work Study Program; Livingston Elementary School; Rutgers Cooperative Extension of Middlesex County.

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**Other base program areas this program applies to:**

Leadership & Volunteer Development

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